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Syracuse, Etruria and the North: Some Comparisons

HUGH HENCKEN

PLATES 56-71

This study of some early graves from the cemetery at Fusco is not intended to be another consideration of protocorinthian vases. Vases will be used here only to suggest dates. Attention will rather be focused on the metal objects which indicate connections between the early colonial Greeks of Syracuse and other peoples of Italy and elsewhere. There were connections between Sicily and Etruria even before the founding of the Greek colonies, but with the settlement of the Greeks, these parallelisms became more numerous. Syracuse has an especial importance in this regard, since the earlier Greek graves were especially rich in metal objects.

I am very grateful to Professor Luigi Bernabò Brea, Director of Antiquities at Syracuse, for permission to study these graves and for placing at my disposal the facilities of the Museo Nazionale at Syracuse. I am also deeply indebted to Dr. Maria Teresa Pisanò for her unfailing kindness and help. The photographs were taken by Signor Fontana and the drawings were made by Signor Puzzo, and to them I am deeply grateful for their excellent work. I am also obliged to Mrs. Donald Brown for drawings of comparative material.

A primary question is that of the chronology of the graves as shown by the vases. Views on the dating of vases can of course vary within certain limits. I have followed the course of adopting the dates of one scholar very familiar with the material, Dr. François Villard of the Centre National de la Recherche Scientifique, who with Professor G. Vallet is conducting the French excavations at Megara Hyblaea. Their experience in excavating stratigraphically the undisturbed areas of the town is of great importance in the problems of colonial chronology.

The dates given are accordingly those suggested by Dr. Villard for each grave on the basis of vases, since the dating of the vases is the only means of dating the accompanying metal objects. The few graves with metal objects but no vases have been omitted, since they are not placed chronologically.

EARLY SYRACUSAN GRAVES WITH VASES AND METAL OBJECTS

This includes most graves of this kind excavated by Professor Paolo Orsi at Fusco¹ from the founding of the colony about 733 to the beginning of the 6th Century. After the beginning of the 6th Century metal objects become extremely rare. I have had to omit a few graves the objects from which have disappeared, doubtless due to vicissitudes of war, though I have included vanished objects when they were illustrated by Orsi or sufficiently described. I have illustrated practically every object and vase from these graves that is at present available for study. In connection with this, I should add that I have continued to use some terms for vases, such as "skyphos" and "kylix" in Orsi's sense, since a number of these are not now available and hence it has seemed better not to substitute other terms for his.

I have placed the graves in chronological order following Dr. Villard's dates.

Grave 223. *NotScav* (1895) 138. ca. 725. Pl. 56, figs. 1 and 1a. A little sarcophagus contained remains of two skeletons which must have been those of children. They were lying in opposite directions. How long an interval separated these two burials we cannot tell, but as will appear later, multiple burials at Fusco sometimes suggest family interments, and multiple graves of children could well be the result of epidemics. The objects in the sarcophagus were an aryballos (ca. 725) with a star pattern on the shoulder, a disc-headed pin of bronze with moldings the lowest of which is cubical, and an iron pin not available for study.

Grave 219. *NotScav* (1895) 136, figs. 14, 15, 16. ca. 700. Pl. 56, figs. 4, 4a. Here a bronze bowl had been placed in a hollow in the rock surrounded with stones and covered with a slab. It contained the cremated remains of a young person. The bowl is 35 cms. in diameter, and its rim is decorated with a row of bosses. The bowl also contained five aryballois and a rough bowl (fig. 4:5) brown to dirty buff

¹ *NotScav* (1893) 445f; (1895) 109f.

in color, which according to Dr. Villard is locally made Syracusan ware. Two of the aryballoii (fig. 4:1,4) are not far different from that in Tomb 223, but two others (fig. 4:1,3) are nearer to the piriform type. One is the famous example with animal friezes, which Dr. Villard dates to about 700, though fig. 4:4 may be older. Of the fifth only fragments remain.

Grave 326. *NotScav* (1895) 149, figs. 31, 32, 33, 34, 680-670. Pl. 56, fig. 2. A grave cut in the rock contained a skeleton, an aryballos, the lid of a pyxis, about 50 discoidal paste beads and two bronze fibulae, one *a navicella* (fig. 2:2) and the other *serpegiante con bastoncini* (fig. 2:4). The latter fibula, the lid and the aryballos are not now available for study. Dr. Villard dates the aryballos 680-670. Orsi remarks that bronze fibulae are rare in the graves at Fusco. Evidently they were at this time being replaced by iron ones, which are more numerous.

Grave 308. *NotScav* (1895) 146, figs. 28, 29, 30. Second quarter of the 7th Century. Pl. 57, figs. 5, 5a. This was a little grave cut in the rock with remains of a cover. It contained two skeletons evidently of children laid side by side. Since the contents of the tomb seem reasonably homogeneous, the two burials are likely to have been roughly contemporary if not simultaneous.

The grave contained five aryballoii (fig. 5a), a piece of double linked bronze chain (fig. 5:8), a bronze ring (fig. 5:2), a large bronze bead (fig. 5:1), a bronze pendant (fig. 5:3), two bronze fibulae, one of which retained part of its bone covering (fig. 5:4,5), a scarab of greenish faience and one of white faience (fig. 5:6,7). Other objects not now available for study are a skyphos, two disc-headed bronze pins, a fibula *serpegiante a bastoncini* like that from Tomb 326, and two small fibulae *a navicella massiccia*. The metal objects were apparently all of bronze.

Tomb 205. *NotScav* (1895) 133. Second quarter or middle of 7th Century. Pl. 57, figs. 3, 3a. A sarcophagus deposited in a deep hollow in the rock contained one extended skeleton. Beside it were a skyphos (fig. 3) and a bluish green faience spindle-whorl. On the breast was a pile of eight thin silver rings (fig. 3a:3) and a bronze fibula with a very long catch (fig. 3a:2) that Orsi describes as "omega-shaped," while at the shoulders were two bronze pins with disc heads and rather faint moldings below (fig. 3a:1).

The fibula is notable, because it is not really omega-shaped and belongs to the series of animal fibulae. See grave 421 infra, plate 65, fig. 23.

Tomb 175 bis. *NotScav* (1895) 126, fig. 6. The three kylikes belong to the second quarter and middle of the 7th Century. Pl. 58, figs. 7, 7a. This was one of a group of children's tombs. A trench in the rock was divided into two by a slab, and one of the spaces thus made was occupied by 175 bis. It contained the piled up bones of a child, evidently moved from elsewhere. Beside the three protocorinthian kylikes (fig. 7:1,2,3) there were also two pots of local ware (fig. 7:4,5), a little conical bowl of buff ware with brown bands and two holes in the rim, and a two-handled cup of buff ware covered with reddish paint. There was also an aryballos of grey ware of eastern Greek type (fig. 7:6), pieces of an iron fibula with "ivory" and amber segments on the bow (fig. 7a:1), a pendant of dark grey stone (fig. 7a:2), strung when found on a piece of iron, perhaps the pin of the fibula, some 40 white faience beads and a heart-shaped pendant which Orsi says is made of a fruit stone (fig. 7a:3).

Tomb 486. *NotScav* (1895) 183. The skyphos, (wrongly restored) belongs to the second quarter or middle of the 7th Century. Pl. 57, figs. 6, 6a. This was in a little sarcophagus whose contents were disturbed, though two small bronze *navicella* fibulae with very long catches remained at the shoulders (fig. 6a). There were also fragments of kylikes which I did not see.

Grave 556. *NotScav* (1903) 533, figs. 13, 14. Second quarter of 7th Century. Here a large bronze cauldron (pl. 58, figs. 10, 10a) had been sunk in a cylindrical pit in the rock. It was found in fragments, but it was possible to draw it. It had three and perhaps originally four handles soldered below the rim. The grave had been plundered and no bones were found, but a piriform aryballos of the second quarter of the 7th Century was found with the fragments of a small black kylix. I did not see these objects.

Grave 412. *NotScav* (1895) 164. Mid 7th Century or third quarter of the 7th Century. Pl. 62, fig. 9. This was in a large sarcophagus placed in a trench in the rock and protected by an enormous slab. In it was a single skeleton. It contained a lekythos with a conical body which Orsi says is like *NotScav* (1895) 132, fig. 10, but I did not see it. It also contained a pyxis (fig. 9) which for Dr. Villard is mid 7th Century or third quarter of the 7th.

There were besides a small bronze *navicella* fibula with knobs and a long catch like plate 61, 12a from grave 428. There was also another of the usual kind of iron, bone and amber as well as a scarab. I did not see any of these objects.

Tomb 471. *NotScav* (1895) 180. After the middle of the 7th Century, perhaps in the third quarter of the 7th Century. Pl. 58, fig. 8. A wide trench in the rock contained a sarcophagus covered with a slab. In it was a skeleton without grave goods. On the slab lay another skeleton accompanied by pieces of a dozen skyphoi which I did not see, and a brown olpe with a reserved band of buff around the middle. This Dr. Villard classes as local Syracusan ware. There were also a pyxis and an aryballos as well as the remains of an iron and "ivory" fibula like those from several other tombs. I did not see the fibula.

Grave 465. *NotScav* (1895) 179, fig. 77. Third quarter of 7th Century. Pl. 59. Here a small sarcophagus contained what must have been a family burial. In one corner of the sarcophagus was a bronze bowl 34 cms. in diameter like that from Grave 219 but with a plain rim (figs. 11a, 11b). It contained cremated bones. Also in the sarcophagus were the skeletons of three very young children and a small animal, perhaps a dog. At the shoulders of one were two iron fibulae (fig. 11). The bows of each were covered with two pieces of "ivory" separated by a piece of amber. Another had at the shoulders two tiny bronze fibulae (fig. 11) with leaf-shaped bows with longitudinal ridges. There was also a little gold button which I did not see. On the cover of the sarcophagus were an aryballos (fig. 11c) which Dr. Villard places in the third quarter of the 7th Century, and a rough olpe which I did not see.

Grave 276. *NotScav* (1895) 143, fig. 24. Third quarter of the 7th Century. Pl. 59, fig. 12. This was a sarcophagus that had been lowered into an opening in the rock. Outside the sarcophagus were a large pyxis (fig. 12:2) which Dr. Villard dates to 650-640, a scale aryballos (fig. 12:1) which he dates to 640-630, as well as a black kylix and a bucchero kantharos which I did not see.

In the sarcophagus was a single skeleton. On the breast was a silver spiral and near the head two iron disc-headed pins with knobs on the shaft and a pair of iron fibulae of the usual kind with amber and "ivory" parts. I did not see any of these metal objects. On either side of the body was a vase of

coarse pinkish ware. One of these is a little unpainted pot (fig. 12:4), and the other is an ovoid one (fig. 12:3) with red bands. There was also an erotic vase of white faience with brown spots (fig. 12:5) which Dr. Villard considers Rhodian or oriental.

Grave 428. *NotScav* (1895) 167, figs. 57-66. Third quarter of the 7th Century. Pl. 60, figs. 13, 13a, and pl. 61. This was by far the richest grave of those with metal objects. Here a medium sized sarcophagus had been placed in a hollow in the rock. On the lid were slight remains of a skeleton. This was surrounded by broken vases, and others were found in the upper part of the space between the sarcophagus and the sides of the rocky hollow which contained it. Orsi mentions several little skyphoi among these vases. I have seen only one of these (fig. 13:7), and Dr. Villard dates it to the second half of the 6th Century. Conceivably these belonged to the skeleton on the lid of the sarcophagus. In any case they were presumably intruders and without effect on the date of the other objects. In the sarcophagus was a very youthful skeleton covered with pins, fibulae, rings and silver beads but no vases. If the skeleton on the lid was not connected with the little skyphoi, this could be regarded as the grave of two members of the same family. Dr. Villard also kindly tells me that in protocorinthian graves vases of the same date are sometimes found both inside and outside the tomb. This leads to the idea that part of the grave offerings were sometimes placed on the cover before the earth was filled in. Here at least the metal objects on the inside cannot be later than the earlier group of vases on the outside. Therefore the metal objects are not later than the third quarter of the 7th Century.

The vases found outside the sarcophagus are the well-known oenochoe (fig. 13a) of the mid-7th Century with its lid (not photographed), the mouth of another (fig. 13:1), a pyxis of about 630 (fig. 13:2), the owl vase of ca. 630 (fig. 13:3), two aryballois of the 3rd quarter of the 7th Century (fig. 13:4, 5), another of grey bucchero (fig. 13:6), one of several very small skyphoi (fig. 13:7) which belongs to the second half of the 6th Century and which must be an intruder, and a small bowl (fig. 13:8) that cannot be identified in Orsi's report.

According to Orsi there were also the following vases which I did not see: another oenochoe in

fragments; fragments of at least four jugs; a stamnos and some kylikes.

In the sarcophagus by the legs of the skeleton were two bronze pins (pl. 61:13) with knobbed shafts, the lowest member of which is cubical. There were also two iron pins of the same type which I did not see. Four bronze discs, two of which have rosettes (pl. 61:3), were said by Orsi to have been their heads. Ten iron fibulae (pl. 61:7-11) were found, four near the legs, four near the middle of the skeleton, and two on the right shoulder. These have bone coverings on the bows sometimes separated at the top by an amber section (pl. 61:8,11) and sometimes by a bone section (pl. 61:9,10) in which there may be a space for an amber setting. It is notable in these fibulae that the catches are often very long. Along the trunk of the skeleton up to the neck were a dozen very small bronze fibulae *a piccola navicella* in pairs (pl. 61:12). Some of these have very long catches and two have little knobs on the sides of the bow (pl. 61:12c,l). There were also two larger bronze *navicella* fibulae with engraved bows (pl. 61:45). From the shoulder region came another bronze fibula with a plain and solid bow (pl. 61:6) and with a catch that is not only very long, but wider in proportion than the others.

There were also six thin silver rings (pl. 61:1), two on each shoulder and two between the shoulders.

Around the neck had been a necklace of beads of thin silver including one large one of a different form (pl. 61:2).

Grave 366. *NotScaev* (1895) 156, figs. 42, 43, 44. Third quarter of the 7th Century. Pl. 60, figs. 14, 14a. This was in a sarcophagus deposited in a trench in the rock. One end of the sarcophagus had been broken by a much later burial, but its contents were undisturbed. At the feet of the skeleton were three aryballooi (fig. 14). That with the stag and the griffin (fig. 14:3) dates the grave. Under the skull lay two silver pins (fig. 14a). One has a disc-shaped head, knobs on the shaft and a rectangular member below them. The other was evidently the same but is now broken. Under the skull there were also a silver ring that according to Orsi had a setting for a scarab and also two small broken silver rings (fig. 14a).

Grave 158. *NotScaev* (1895) 122, figs. 2, 3, 4. Third quarter of the 7th Century. Pl. 62, figs. 16, 16a, 16b. Here a sarcophagus was found in a deep

trench in the rock. It contained the skeletons of two young individuals laid in opposite directions. On the chest of one of them lay an iron fibula with a long catch (fig. 16). The bow is covered with two pieces of "ivory" with a piece of amber between them.

Between the sarcophagus and the side of the trench were two aryballooi. One of them (fig. 16a:3) has a series of pendant hooks on the shoulder. The other (fig. 16a:2) has rising hooks and rosettes of dots. There were also four kylikes with rays on the base and triglyphs and metopes of vertical lines of which one is shown in fig. 16a:6. Another, now broken, may be fig. 16a:7. Fig. 16a:8 is perhaps a third though it lacks the rays. Of the four, one covered an egg and the other "whitish farinaceous substance."

On the sarcophagus and protected by stones stood a crater of reddish brown ware (fig. 16b) which contained no cremated bones, but a few pieces of charcoal, a shell, a scale aryballos (fig. 16a:1), an aryballos of white and black faience (fig. 16a:4) and an undescribed kylix (perhaps fig. 16a:5) full of purified clay. Fig. 16a:5 is black with a buff line at the shoulder.

Dr. Villard tells me that the crater (fig. 16b) and one kylix (fig. 16a:8) are local Greek products and that the faience aryballos (fig. 16a:4) is an oriental import.

Grave 108. *NotScaev* (1893) 476 and figs. on pp. 476-78. Third quarter of 7th Century. Pl. 62, figs. 15, 15a. Here there was a little rectangular grave cut in the rock and covered by a large slab. On the slab lay a skeleton accompanied by two aryballooi and a kylix (fig. 15a:2,4,5). There were also a small cup and fragments of a crater which I did not see, but Orsi shows on p. 477 one which he says is similar.

Inside the grave itself was another skeleton accompanied by an oenochoe (fig. 15a:3), and a pyxis (fig. 15a:1). On the breast of the skeleton were two thin rings, one of bronze and the other of silver (fig. 15). On the left shoulder were two bronze disc-headed pins with knobbed shafts (fig. 15) and a spindle-whorl of bluish-green faience with a dark pattern (fig. 15). Under the chin was an amber bead.

Grave 505. *NotScaev* (1895) 187. End of the third quarter of the 7th Century. Pl. 65, fig. 18. Here a disordered skeleton was found in the bare earth with an aryballos and fragments of a bronze basin

with bosses on the rim. It is like that in pl. 56, fig. 4a from Grave 219 (about 700).

Grave 472. *NotScav* (1895) 181, fig. 82. End of the third quarter of the 7th Century. Pl. 63, figs. 17, 17a, 17b. Here a sarcophagus had been placed in a grave in the rock. On the cover and in the spaces between the sarcophagus and the sides of the trench were numerous vases, many represented by fragments. These include a skyphos with a frieze of animals (fig. 17a:3), four kylikes of which three are shown in fig. 17a:1, 9, 10, two large olpai (fig. 17a:4, 5), other fragments of olpai (fig. 17a:2, 6, 8), three aryballois (fig. 17b:3, 4, 5). There were also a pyxis, which I did not see, and other fragments. Fig. 17a:7 was not certainly identifiable in Orsi's report though it bears the number F 472.

The sarcophagus contained the bones of an adult and two or three children.

Since all the vases both inside and out belong to much the same period, the burials were perhaps all members of one family and were not far separated in time. Though the sarcophagus was found covered, it had at some time been disturbed, since all the bones were found heaped at one end.

In the sarcophagus there were also fragments of a hammered bronze kylix with riveted handles (shown restored in fig. 17:2), a high aryballos (fig. 17b:1), a round aryballos of white faience (fig. 17b:2), a silver ring and an amber bead (fig. 17:1, 3).

Grave 441. *NotScav* (1895) 175, fig. 73. 630-600. Pl. 64, figs. 19, 19a. A small sarcophagus lay on top of another containing Grave 440. There were fragments of about twenty skyphoi and kylikes on the cover, of which I illustrate two. One is late protocorinthian (fig. 19a:1) and the other is Ionian² (fig. 19:2). Dr. Villard dates the first to 630-620 and the second to 630-600. A part of another like fig. 19a:1 is also at Syracuse. On the sarcophagus there was also a large jar in fragments. I did not see any vases except the three already mentioned.

In the sarcophagus was the skeleton of a child. On its breast were two silver rings (fig. 19:3, 4). At the shoulders were two large iron fibulae with long catches (fig. 19:6, 7). These had the usual pieces of "ivory" and amber on the bow. In the fibula in fig. 19:7 all the elements covering the bow were of "ivory," and the center one had a round setting presumably for a missing amber stud. This also has

a very long catch. Fig. 19:5 is a piece of amber that may have belonged to a fibula.

Under the chin there were also two small bronze animal fibulae originally with very long catches to judge from the length of the pins (fig. 19:1, 2). Orsi called them horses or dogs, but his fig. 73 is deceptive. Their faces seem more human, and they have long hair, while the projecting ears had big earrings.

This grave shows the continued use of animal fibulae to the latter part of the 7th Century.

Grave 261. *NotScav* (1895) 141, fig. 20. ca. 620. Pl. 63, figs. 20, 20a. This was in a small trench in the rock that retained its cover and contained a skeleton that must have been of a young individual. Around it were four alabastra of which I have seen two (fig. 20). Dr. Villard dates them to about 620. There was also a small amphora of coarse ware that I have not seen. The grave also contained a heavy double axe of iron (fig. 20a).

Grave 421. *NotScav* (1895) 165, fig. 55. ca. 600. Pl. 65, figs. 23, 23a, 23b. This was in a large sarcophagus covered by an enormous slab. On this was a large *olla* which I did not see. This contained remains of a little skeleton. Also on the cover were several cups (fig. 23a:1; fig. 23b:1, 2) and two kylikes (fig. 23a:2; fig. 23b:3). According to Dr. Villard figs. 23a:2 and 23b:1 are Ionian of about 600. Fig. 23a:1 would belong to the end of the 7th Century. The contents of the sarcophagus is then not likely to be far from 600.

This contained two skeletons laid in opposite directions. One appeared to have no grave goods. Near the head of the other were two small bronze fibulae (fig. 23:1, 2) which Orsi says are in the form of little horses. They are in any case animal fibulae like those from Grave 205 of the second quarter or middle of the 7th Century. Also near the head were a little silver ring, a spindle-whorl of greenish-blue faience with dark lines (fig. 23b:5), two bronze disc-headed pins with knobs on the shaft (one in fig. 23:5) and a small pinkish-buff aryballos that Dr. Villard believes may be Cretan (fig. 23a:3). On the breastbone was a thin silver spiral (fig. 23:4), and beside the skull lay two large iron fibulae with "ivory" coverings on the bows (fig. 23:6, 7). Orsi says that there were once amber settings on the tops of the bows. His somewhat idealized fig. 55 shows the arrangement. In

² For such Ionian cups see F. Villard and G. Vallet, *Mémoires de l'Académie de l'Institut de France* (1955) 14f.

this case again one can only say that the vases on the top of the grave give a *terminus ante quem* of about 600 for the fibulae and other objects in the sarcophagus.

Grave 267. *NotScav* (1895) 142. End of the 7th Century or beginning of the 6th. Pl. 66, fig. 24. Here a big amphora 66 cms. high with a reversed SOS on the neck contained the skeleton of a child and pieces of an iron fibula with an ivory covering on the bow. I have not seen this fibula.

Grave 165. *NotScav* (1895) 125. End of the 7th Century or the beginning of the 6th. Pl. 66, figs. 25, 25a. Here a sarcophagus retaining its cover was found in a deep hollow in the rock. On the cover were two skeletons of children accompanied by two skyphoi (fig. 25a:2,4), a pyxis of coarse pinkish buff ware with reddish lines which Dr. Villard classes as local Syracusan (fig. 25a:1), a little black pot with a high handle which I did not see, and a long alabastron of grey ware which for Dr. Villard gives the date of the grave (fig. 25a:5).

In the sarcophagus were two skeletons of adults with their heads to the east and between them that of a baby. On the breast of one skeleton was an iron pin with a disc-shaped head (fig. 25:1), a green faience spindle-whorl with black lines (fig. 25a:3), and a small scrap of gold leaf. There were also two thin silver rings and a little bronze *navicella* fibula (fig. 25:2,3).

Orsi was surely right in thinking that this is a family grave. It looks as though the five individuals had died at much the same time, and one may suspect an epidemic. It strengthens the case for other multiple burials being those of one immediate family. Before modern medicine, several deaths often occurred close together in one family, especially among children. Orsi further remarks that in this part of the cemetery many such family graves were found, but that in the western part of the cemetery the graves were individual burials. He notes that the same separation could be observed at Megara.

Grave 30. *NotScav* (1893) 458 and illustrations on pp. 458-59. This cannot be dated more closely than to the 7th Century. Pl. 64, figs. 22, 22a. Here a large trench had been made in the rock, and in the bottom of this a grave had been cut deeper still. It was covered by two heavy slabs. On these lay a pointed alabastron of pinkish yellow clay that Dr. Villard thinks is probably eastern Greek (fig. 22).

In the grave itself were slight remains of the skeleton of a youthful person who wore a necklace of plaited silver wire with silver terminals. Near the middle of the skeleton were five silver rings in a pile, three of which had evidently been set with scarabs (fig. 22a).

Grave 367. *NotScav* (1895) 157. 7th or early 6th Century. Pl. 63, fig. 21. A big amphora, lying on its side and closed by the broken bottom of another pot, contained a child's skeleton, fragments of vases, and an iron fibula of usual form with attachments of bone and amber. I have not seen any of these objects. Outside the amphora were two little cups which Dr. Villard classes as local Syracusan ware of the 7th or early 6th Century (fig. 21).

Grave 488. *NotScav* (1895) 183. Fourth quarter of the 7th Century or the beginning of the 6th. Pl. 67, figs. 26, 26a. Here an amphora, which I did not see, was found lying on the rock. It contained a child's skeleton, a long alabastron (fig. 26a) and three square bronze plates. One is plain. Another (fig. 26) has the figure of a deer in repoussé, and the third had a bird, but this I did not see.

Grave 440. *NotScav* (1895) 174, fig. 72. End of the 7th Century or beginning of the 6th. Pl. 66, fig. 27. Here a small sarcophagus contained the skeleton of a boy surrounded by numerous vases. There were three alabastra, two aryballois, a pyxis and eight long grey alabastra of which I saw four.

On the left shoulder were remains of a large iron fibula with "ivory" and amber parts which I did not see.

Grave 495. *NotScav* (1895) 184. Beginning of the 6th Century. Pl. 67, figs. 29, 29a. A "magnificent" sarcophagus was found in a deep trench in the rock. On the cover stones were two skeletons accompanied by a skyphos (fig. 29:4) of coarse ware, which Dr. Villard places at the beginning of the 6th Century, and three long grey alabastra (fig. 29:1,2). In the sarcophagus was another skeleton. By its side was a clay loom-weight (fig. 29:3) and a shell, and on the shoulders were two bronze disc-headed pins with small moldings on the shaft (fig. 29a).

Grave 309. *NotScav* (1895) 147. After 600. Pl. 67, figs. 28, 28a. This was cut in the rock and contained two graves, one above the other and separated by a layer of earth. The later one need not be considered except to note that it represents the re-use of the grave at a later period, and that this was different from family burials that seem more or less

contemporary. The lower burial was occupied by a skeleton at whose feet was a small one handled bucchero cup of the end of the 7th Century (fig. 28a:3). Between the legs were two skyphoi. One is for Dr. Villard middle or late Corinthian (fig. 28:1), and therefore after 600. The other skyphos I did not see. The other vases he would place as a group about 620. These include a pyxis (fig. 28:3) found between the legs, a black oenochoe (fig. 28:5) found at the shoulder, a little cup (fig. 28a:2), and a lekythos with a long neck (fig. 28a:1). There are also two sherds (fig. 27:2,4) which are not identifiable in Orsi's account.

On the ribs was a fibula of iron, bone and amber which I did not see. In any case this appears to be the last appearance of this type of fibula—indeed of any fibulae at all—at Fusco.

ETRURIA AND THE NORTH

This brings us to the comparisons of the metal objects from Syracuse with those from Etruria and elsewhere, and before proceeding further, it might be well to review briefly the chronology of Etruria, so that the various finds may be more readily placed in time. The periods that I use are those established by Montelius and later revised by Pallottino.⁸ The dates that I give differ only in details from those of Pallottino, though I apply the scheme in a rather broader and more general sense than he does. For it is not necessary or possible to take account here of the various cultural overlappings that he has so acutely perceived.

Period I. The period of the disc fibulae, 10th or 9th Century to about the middle of the 8th. The beginning is not clearly fixed but the material has many likenesses, including the characteristic disc fibulae, to that from the prehellenic cemetery at Cumae.⁹ The native Iron Age village of Cumae was on the hill later occupied by the Greek acropolis, and its cemetery was between the Greek acropolis and the earliest Greek cemetery. Hence both must have ceased by about 750, the date usually assigned to the founding of the Greek colony. That the native Iron Age population continued there down to about this time is shown by two little

geometric cups from the prehellenic graves that for Blakeway¹⁰ could hardly be older than 800.

At the same time, there is no reason why Period I in Etruria should have given way to Period II at the same moment that the Greeks suppressed prehellenic Cumae. But it must have followed fairly soon after.

Period II. This is best dated by vases of Late Geometric type contemporary with the founding of Cumae and the first Sicilian colonies. They are either imports or closely imitated from imports. Åkerström attempted unsuccessfully to reduce the dates of the earliest in Italy to the end of the 8th Century, but admitted that they reflect a Greek style beginning about 750.¹¹ Professor Rodney Young prefers about 725 for the beginning in Greece,¹² but this relatively small difference does not matter very much as far away as Italy.

Period III. Period III is that of the orientalizing style and is best dated by protocorinthian connections. One of the earliest finds of this period, the Bocchoris Tomb at Tarquinia, contains imitations of protocorinthian vases which for Dunbabin¹³ would be after the beginning of the 7th Century. Mrs. Dohan¹⁴ placed this tomb at about 670. If 675 were taken as a round figure for the beginning of Period III, it would probably not be very far wrong. The end of Period III is marked by the influx of Corinthian vases at the end of the 7th Century.

Bronze bowls with embossed rims. The earliest of these at Syracuse belongs to Grave 219 of about 700 (pl. 56, fig. 4a), and fragments of another form part of 505 of the third quarter of the 7th Century. A third (pl. 68, fig. 31:1) from Syracuse was found in the pre-Orsi excavations at Fusco.¹⁵ I give below a list of the others that have come to my attention from Greek contexts and sites in Italy and elsewhere, without pretending that it is in any way complete.

Greek Contexts

Megara Hyblaea. Bowl found in the pre-Orsi excavations.¹⁶

⁸ *MonAnt* 36 (1937-38) 123f; *StEtr* 13 (1939) 85f; *Rend-PontAcc* (1948) 31f. See also H. Hencken, *Zephyrus* 7 (1956) 138f.

⁹ E. Gábrici, *MonAnt* 22 (1913).

¹⁰ *JRS* (1935) 129.

¹¹ *Der geometrische Stil in Italien* (Leipzig 1943) 88.

¹² *Hesperia* Supplement 2 (1939) 5 and 194.

¹³ T. J. Dunbabin, *The Western Greeks* (Oxford 1948) 466.

¹⁴ E. H. Dohan, *Italic Tomb Groups* (Philadelphia 1942) 108.

¹⁵ L. Mauceri, "Relazione Sulla Necropoli del Fusco," *AdI* (1877) pl. AB:25; pp. 41, 55.

¹⁶ A. Furtwängler, *Olympia* IV (Berlin 1890) 94 and pl. xxxv, no. 646.

Corfu. Example in the Museum.¹¹

Olympia. Two examples.¹²

Etruria

Bisenzio, Capodimonte, Tomb XII.¹³ This was part of the group of tombs containing Late Geometric vases and hence belonging to the later 8th or the beginning of the 7th Century. Tomb XII contained such a bronze bowl, and though it did not also include Late Geometric vases, there is no reason to separate it chronologically from those that do. This would then seem to belong to the same general period as the example from Syracuse, grave 219.

Tarquinia. A relatively early example comes from the Tomba del Guerriero¹⁴ that Pallottino assigns to his Period II.¹⁵ Åkerström has raised doubts about the integrity of this famous tomb, but a study of the original accounts of Helbig¹⁶ inspires confidence so far as concerns the objects that he reported, and this bronze bowl is among these.

Vulci. A bowl of this type is attributed to the Isis Tomb¹⁷ of about 600.

Capena. Similar bowl from a 7th Century grave in the Museo Luigi Pigorini, Rome.

Chiusi. Bowl from the tomb of Poggio alla Sala¹⁸ in the Museo Archeologico, Florence. Dr. G. Maetzke kindly informs me that the date of this tomb, or perhaps two tombs combined, would be about 650-630.

Orvieto. Tomb 1a from Orvieto at the Museo Archeologico, Florence (nos. 76,380-76,441) contains such a bowl and also Certosa fibulae, late situlae and a kylix dated by Dr. Maetzke to the second half of the 6th Century. There are also four more at Florence from Orvieto evidently without context.

Broglia. Between Arezzo and Chiusi. Example found in a votive deposit covering a considerable period of time.¹⁹

Saturnia. A bowl in the Museo Archeologico, Florence. (no. 80,624).

¹¹ A. Furtwängler, *loc.cit.*

¹² R. Paribeni, *NotScav* (1928) 451 (Museo di Villa Giulia, Rome).

¹³ O. Montelius, *Civilization primitive en Italie*, Vol. 3 (Stockholm 1910) pl. 289,4 (hereafter cited as Montelius).

¹⁴ *MonAnt* 36 (1937-38) Col. 157 (note).

¹⁵ *Bdl* (1869) 258; *AdI* (1874) 249.

¹⁶ Montelius, pl. 267:8,11.

¹⁷ D. Randal-MacIver, *Villanovans and Early Etruscans* (Oxford 1924) pl. 45.

¹⁸ M. A. Migliarini, "Scavazione casuale in Toscana," *Bdl*

Other Italian Sites

Corropoli, Abruzzo. In the Museo Luigi Pigorini, Rome, there are six of these bowls (nos. 22, 218-21). They were found in the cemetery of Belvedere in 1878, but the grave groups were not kept separate.

Suessula, Campania. Several were in the Spinelli Collection at Cancello.²⁰

Caracupa, Latium. An example with legs added to make a tripod came from a 7th Century grave.²¹

Bosnia

Osovo. Here a rich Iron Age inhumation grave²² in a tumulus contained among many other things a bronze bowl 40 cms. in diameter (pl. 68, fig. 31:4) of exactly the same bulging shape as the one from Fusco 219 about 700 (pl. 56, fig. 4a). But the same grave contained an example of Luschey's lotus phialai (pl. 68, fig. 31:5) which he dates to the late 7th or 6th Century if not indeed later still.²³

Ilijak in Glasinac. Here an Iron Age tumulus again contained a very rich inhumation grave including a bronze bowl²⁴ with a bossed rim, but not of the bulging type. With it, among many other objects, was a fluted bowl (Zungenphiale) of the deep shape that Luschey finds probably belongs to the 7th Century and less probably to the 6th.²⁵ The type is of course very familiar in Italy especially in Etruria in the 7th Century.

Germany

German examples are not before Hallstatt D, the second phase of the central European Iron Age that began in the later 6th Century. Hence the dated example from Orvieto in the second half of the 6th Century forms a convenient chronological link between the older Italian ones and their counterparts beyond the Alps.

Pflugfeldern, Württemberg. Fragments of such bowls came from a tumulus of this period.

Hundersingen, Württemberg. Two others were found in a rich grave under a tumulus.²⁶ Mr. J. M. de Navarro and Dr. S. Schiek kindly inform me

(1864) 138.

²⁰ A. Furtwängler, *Olympia* IV (Berlin 1890) 94.

²¹ H. Hencken, *Zephyrus* 7 (1956) 175, fig. 30.

²² F. Fiala, *Wissenschaftlichen Mittheilungen aus Bosnien und der Herzegowina* 6 (1899) 39.

²³ H. Luschey, *Die Phiale* (Bleicherode am Harz 1939) 121.

²⁴ F. Fiala, *Wissenschaftlichen Mittheilungen* 3 (1895) 7, fig. 5.

²⁵ H. Luschey, *Die Phiale*, 38, 39, 93.

²⁶ P. Reinecke in L. Lindenschmidt, *Die Altertümer unserer heidnischen Vorzeit* 5 (1911) 328, pl. 56, no. 1033, a,b.

of two more found recently in another tumulus of the same group at Hundersingen. The examples from Hundersingen are late Hallstatt D and hardly before 500 B.C.

Pürgen, near Landsberg am Lech, southern Bavaria. Another bowl from a grave of Hallstatt D in a tumulus.²⁷

Switzerland

Portalban, Lake Neuchâtel. Fragments from a lake-dwelling.²⁸

France

Taussac, Hérault. I am also grateful to Mr. de Navarro and the Abbé H. Giry for the information that another such bowl exactly like the one in the pre-Orsi excavations at Syracuse is now in the Musée National d'Ensérune, Hérault. It was found in 1955 at Taussac, Hérault, near a Roman villa of the 1st and 2nd Centuries A.D. The Abbé Giry kindly informs me that he thinks it came from a Roman grave of the same period. If so, it must have been an antique when it was buried.

Bronze bowls with flat rims. An example was found in grave 465 at Syracuse (pl. 59, fig. 11b). Like the one with the embossed rim in grave 219, its widest diameter was some way below the rim. Another bowl of this shape with a rim almost if not quite flat (pl. 68, fig. 31:3) came from the Barberini Tomb at Palestrina.²⁹ The same shape is known from Cyprus in the Cypro-Archaic period (700-475).³⁰

Cauldrons. One of these was found in Grave 556 and was hammered out of one piece of sheet bronze (pl. 58, fig. 10a). This very important type has already been fully studied by Professor C. F. C. Hawkes and Miss M. A. Smith in a paper that will appear shortly.³¹ They show that such cauldrons hammered out of one piece of sheet bronze and with free-riding handles originated in western Asia and spread in various forms to Greece and Italy along with other orientalizing material. The Greeks

carried it westward as their trade began to reach southern France in the 8th Century B.C. and to increase in the 7th. From there the way probably followed the old route of the Cornish tin trade described later by Diodorus which led up the Rhone and then down the Loire to the Atlantic. In any case local bronzesmiths in the Atlantic West imitated such Greek cauldrons, and these, later endowed with supernatural qualities, appear in the oldest Celtic literature of Wales and Ireland. Still other descendants appear in the princely graves of southern Germany and in the Iron Age period called Hallstatt D, plus or minus 500 B.C. I am grateful to Professor Hawkes for sending me in advance of publication the section of this paper dealing with cauldrons.

Necklaces or chains of plaited wire. An example from Syracuse came from Grave 30 (pl. 64, fig. 22a). Several of these came from the cella of the Regolini-Galassi Tomb. They are of gold or silver gilt.³² They are dated by Paret 650-630. Others were found by Minto in three graves at Marsiliana.³³ There fossa grave 10 contained an elaborate gold and silver fibula which is almost a duplicate of a very rare type from the Vetulonian tumulus of Val di Campo,³⁴ which also contained a local aryballos of Corinthian shape³⁵ and hence not before the last quarter of the 7th Century. Another tomb at Marsiliana, with this type of chain, circle grave 39, contained a piriform aryballos and a monkey's head carved in amber, both indicative of Period III. The third grave, 34, is also surely of Period III.

Three silver necklaces of this type have been found at Vetulonia. While the technique of plaited silver wire is the same as that in Grave 30 at Syracuse, the Syracusan clasps are not paralleled. They come from the Circolo del Cono³⁶ (pl. 68, fig. 30:3), the second Circolo delle Pellicce³⁷ and the Tomba della Straniera.³⁸ Pallottino³⁹ has shown that the circle graves of Vetulonia belong to III though containing surviving elements of II. The Tomba della Straniera is also not far from them in date.

²⁷ P. Reinecke, "Eine altgriechische Bronzeschüssel aus Südbayern," *Opuscula archaeologica Oscaris Montelio septuagentario dicata* (Stockholm 1913) 105.

²⁸ V. Gross, *Les protohelvètes* (Paris 1883) 90, pl. XXII:5.

²⁹ C. D. Curtis, "The Barberini Tomb," *MAAR* 5 (1925) 49, p. 38:2.

³⁰ E. Gjerstad, *Swedish Cyprus Expedition* IV,2 (Stockholm 1948) 152, fig. 28:6; 217-18.

³¹ In *AntJ* (London).

³² L. Paret, *La Tomba Regolini-Galassi* (Vatican City 1947)

180f; pl. v:2; pl. vi:3,4; pl. XII:128-31.

³³ A. Minto, *Marsiliana d'Albegna* (Florence 1921) 47f, pl. XII:10,16 (Fossa Grave 10); 79f, pl. XII:15 (Circle Grave 39); pl. XXI:12 (Circle Grave 39); p. 73, pl. XIV:4 (Tomb 34).

³⁴ I. Falchi, *Vetulonia* (Florence 1891) pl. XVIII:9.

³⁵ I. Falchi, *op.cit.* pl. XVIII:13; *CVA Italia* VIII, pl. 373:6.

³⁶ Montelius, pl. 180:10.

³⁷ Montelius, text, Part 2, Col. 888.

³⁸ Montelius, text, Part 2, Col. 846, fig. a.

³⁹ *StEtr* 13 (1939) 107, 111, 113, 123.

Hence one may think that the silver chains from Vetulonia are within the 7th Century like the Syracusean example.

Silver beads. The second Circolo delle Pelliccie also contained a necklace of little silver beads (pl. 69, fig. 32:1)⁴⁰ recalling on a modest scale the large bead in the middle of the necklace from Grave 428 at Syracuse of the third quarter of the 7th Century (pl. 61:2).

Silver was not a conspicuous element in the culture of Sicily in the period before the Greek settlement. But in the Greek graves in Syracuse there are, beside the silver necklaces, some silver pins and spirals as well as numerous little rings. Silver was not prominent either in early Etruria, but it begins to appear in II, at the same time that Greek colonies were founded and becomes much more conspicuous in III in the 7th Century. This does not tell us whether silver was introduced into Etruria by the Greek commerce or how much ethnic or commercial ties between Etruria and the east had to do with it. But at any rate the popularity of silver in Etruria was contemporary with the founding of the Greek colonies in Italy and Sicily.

Small bronze chains. An example occurs at Syracuse in Grave 308 of the second quarter of the 7th Century (pl. 57, fig. 5). This type also occurs at the Siculan cemetery of Finocchito contemporary with the Greek colonial settlement and also in graves in Etruria and in Rome most of which could be placed in the 7th Century.⁴¹

There is, however, one from Tarquinia that must be earlier and which belongs to Period I,⁴² perhaps to the end of I.

Double axes of iron. One of these came from Grave 261 at Syracuse (pl. 63, fig. 20a) with two alabastra of about 620. Orsi remarks that such double axes were in use in his day by stone workers around Syracuse. One might add that this long-lived type in a form adapted for wood-chopping is still alive in New England. Nevertheless it may be worth remarking that this was rare among the

Etruscans except at Vetulonia. There it appears on the stele of Avele Feluske⁴³ (pl. 68, fig. 30:1) which is certainly not before the 7th Century. An actual example came from a big tumulus of Poggio Pepe,⁴⁴ but this seems to be undated.

Of course the most famous example is the iron fascis from the Tomb of the Lictor at Vetulonia (pl. 68, fig. 30:2). Judging by the gold jewelry from it, this is perhaps not very far in date from the date of Grave 261 at Syracuse. The example from the Tomb of the Lictor recalls the famous passage in Silius Italicus (8.485) embodying the tradition that the fasces and other insignia of the Roman state came from Vetulonia.

Pins. I have also included graves with pins, though for this study they have a purely negative interest. The non-Hellenic peoples of Italy were already used to fibulae before the Greek settlement, and they gradually adopted the Greek types. But they used relatively few pins by comparison with fibulae, and they rejected the Greek forms. Only at such north Italian places as Este were pins at all common, and they parallel the fashions of the Hallstatt Iron Age in the Alps and beyond. These northern pins have a distant resemblance to Greek ones since both have numerous knobs on the shaft, but there the similarity ends.

Fibulae. Here the story is very different from that of the pins, and it is clear that the Greeks, the Etruscans and other peoples of Italy and central Europe shared related types. There are several varieties of these fibulae, and I will refer to examples of each with no pretense at giving full lists, since Sundwall⁴⁵ has already given very extensive ones.

1. *Animal Fibulae.* At Syracuse they occur in Graves 205 (second quarter or middle of the 7th Century), 441 (630-600), 421 (about 600). Pl. 57, fig. 3a, pl. 64, fig. 19, pl. 65, fig. 23. Another in the shape of a horse came from Grave 501 at Megara Hyblaea.⁴⁶ These are numerous also on the Italian mainland, though in a wide variety of forms.

a. The Tomba del Guerriero at Tarquinia.⁴⁷ This grave belongs to Archaic II, roughly second half of the 8th Century to first quarter of the 7th.

⁴⁰ Montelius, text, Part 2, Col. 886, fig. b.

⁴¹ For list see A. Åkerblom, *Der geometrische Stil in Italien* (Lund and Leipzig 1943) 30.

⁴² L. Pernier, *NotScav* (1907) 33 (Selciatello 55). Museo Archaeologico, Florence.

⁴³ Montelius, pl. 189:11.

⁴⁴ Montelius, text, Part 2, Col. 916, fig. a.

⁴⁵ J. Sundwall, *Die älteren italischen Fibeln* (Berlin 1943).

⁴⁶ P. Orsi, "Contributi alla Storia della fibula greca," *Opuscula archaeologica Oscar Montelio dicata* (Stockholm 1913) 195, fig. 4a.

⁴⁷ Montelius, pl. 286:4.

b. Poggio Gallinaro, Tomb 8⁴⁸ (pl. 69, fig. 32:4). The lion fibulae from this tomb suggest the orientalizing style of Period III.

c. The Bocchoris Tomb⁴⁹ (pl. 69, fig. 32:5). The material belongs to the beginning of Period III.

d. The second Circolo delle Pelliccie at Vetulonia⁵⁰ (pl. 69, fig. 32:3). This belongs to Period III.

e. The Bernardini Tomb at Palestrina.⁵¹ Here there were ten fragments of silver fibulae in the shape of chimaeras. My illustration (pl. 69, fig. 32:2) is a reconstruction of a complete example. This tomb is of course one of the finest of Period III.

f. Three tombs of Period III at Marsiliana also had animal fibulae including Tomb LXVII or Circolo degli Avori that belongs to the developed orientalizing style.⁵²

g. Tarquinia. Pallottino's Chamber Tomb 136 of Archaic III.⁵³

h. Bologna. Other examples occur there in Benacci II and in the Arnoaldi Period.⁵⁴ Pl. 70, fig. 33:2,4,5. Benacci II is later than Period II in Etruria because it contains types of both II and III in Etruria.⁵⁵ Arnoaldi is a belated form of III in Etruria and can hardly begin before 650.

i. In northern Italy examples occur at Este in Este II (equals Benacci II and Arnoaldi) and also later.⁵⁶

j. In central Europe such animal fibulae belong to Hallstatt C⁵⁷ (pl. 69, fig. 32:6), the first phase of the Iron Age there, which contains imported types of Benacci II but even more of Arnoaldi. It hardly begins before 700.

As for the origin of this type it is not likely to have been in Greece or the East, since Blinkenberg has noted only a single example in that direction,⁵⁸ and Robertson has added only one more from Ithaca.⁵⁹

There is on the other hand an example without context from Bologna (pl. 70, fig. 33:3),⁶⁰ whose disc-shaped catch is characteristic of Period I of the

Iron Age in Italy, while the very large spring with a single turn is a surviving feature from the Late Bronze Age. Also in Sicily there is the hoard from Priolo containing another animal-shaped fibula⁶¹ (pl. 70, fig. 33:1). Sundwall was inclined to place both of these in the last quarter of the 8th Century on purely typological grounds, though I should think that on the same typological grounds both could be a good deal older. He also remarks that animal fibulae are commonest in northern Italy.⁶²

In any case the idea of the animal fibula—the diversity of the forms and of the animals makes further comparison difficult—does not seem to be oriental or Greek. Nor is it likely to be central European for the first examples there belong to Hallstatt C which begins hardly before 700.

Hence Italy, possibly northern Italy, is the likeliest place for the origin of the animal fibula. This would mean that the Greeks of Syracuse had adopted this idea from peoples on the mainland, very possibly the Etruscans, among whom animal fibulae were popular in the 7th Century.

2. *Serpentine fibulae with knobs on the sides (serpeggiante a bastoncini).* These occur at Syracuse (pl. 56, fig. 2) in Graves 326 (680-670), and 308 (second quarter of the 7th Century). Examples of this type have been listed by Sundwall,⁶³ though he included several of much more advanced type than those from Syracuse. In any case none in his list are older than Period II in Etruria or the somewhat later Benacci II at Bologna, and they continue into the 7th Century.

Also since Sundwall wrote, the excavations of Dr. G. Buchner on Ischia in the cemetery of Pithecusa have shown that these fibulae are associated there with globular aryballoii like the earliest from Greek Cumae and hence may be placed in the second half of the 8th Century.⁶⁴ Hence the two from Syracuse must belong to the end of the series.

The origin of these fibulae is not clear. Blinkenberg lists a substantial number of these and related

⁴⁸ See supra under "Bronze bowls with embossed rims."

⁴⁹ Montelius, pl. 295:6.

⁵⁰ Montelius, pl. 196:4.

⁵¹ C. D. Curtis, "The Bernardini Tomb," *MAAR* 3 (1919) 31, pl. 8:3-14.

⁵² A. Minto, *Marsiliana d'Albegna* (Florence 1921) 128, pl. XXII:2 (Tomb LXVII); 51, pl. XXII:3 (Tomb XI); 102, pl. XXII:4 (Tomb LIII).

⁵³ M. Pallottino, "Tarquinia," *MonAnt* (1937) Col. 190. G. Cultrera, *NotScav* (1930) 179.

⁵⁴ Montelius, pls. 79:5; 83:13,14.

⁵⁵ M. Pallottino, *StEtr* 13 (1939) 112.

⁵⁶ Montelius, pls. 51:3,4; 54:4.

⁵⁷ N. Åberg, *Bronzezeitliche und frâheisenzeitliche Chronologie, Part II, Hallstattzeit* (Stockholm 1931) fig. 5.

⁵⁸ From Crete, Chr. Blinkenberg, *Fibules grecques et orientales* (Copenhagen 1926) 57, fig. 29.

⁵⁹ BSA 43 (1948) 118, pl. 49:E 23.

⁶⁰ Montelius, pl. 88:2.

⁶¹ Chr. Blinkenberg, *Fibules grecques et orientales* (Copenhagen 1926) 44, fig. 8.

⁶² *Die älteren italischen Fibeln* (Berlin 1943) 62-63.

⁶³ *op.cit.* 61, 245.

⁶⁴ Information kindly transmitted by Dr. Buchner through Prof. C. F. C. Hawkes.

types from Greece though they do not seem to be clearly dated.⁶⁵ Blinkenberg in any case thought that they originated in Italy. So did Sundwall.⁶⁶ This may be so, but, since these fibulae were found on Ischia in Greek graves with globular aryballooi of the second half of the 8th Century, they were being worn by Greeks quite as early as by the people of Italy. Sundwall traces their development and relationships to Italic and Sicilian types, so that their origin is not likely to have been elsewhere. This question cannot be answered at present, but Buchner may well be right in suggesting that they were an invention of the Greeks in Italy on the basis of local forms.

3. *Fibulae with enlarged bows and long catches.* These can be of the *navicella* type with a hollow bow open opposite the pin, or of the solid type. Sometimes they have little knobs on either side of the bow like the two of the very small ones in Grave 428 (pl. 61:12c and l). Also the bow can be enlarged with pieces of amber and also bone, which Orsi often calls ivory. The usual arrangement here is two pieces of bone with a piece of amber or bone between.

Navicella fibulae occur in Graves 326 (680-670, pl. 56, fig. 2:2), 486 (second quarter of the 7th Century, pl. 57, fig. 6a), 428 (third quarter of the 7th Century, pl. 61:4,5,12), and 165 (pl. 66, fig. 25; end of the 7th Century or the beginning of the 6th). A fibula with a solid bow occurs in Grave 428 (pl. 61:6). The fibulae with pieces of bone and ivory on the bow are very numerous and go all the way from Grave 308 in the second quarter of the 7th Century to Grave 309 at the beginning of the 6th. Those in 308 are of bronze, but the others are iron.

Among the oldest fibulae of this kind on the Italian mainland may be those from Pellegrini's first inhumation tomb at Cumae,⁶⁷ which contained four silver fibulae (pl. 69, fig. 34:5), four bronze ones with a knob on either side of the bow (pl. 69, fig. 34:3,4) and two bronze ones whose enlarged bows were covered entirely with amber (pl. 69, fig. 34:1,2).

Dr. Francois Villard has been kind enough to give me his views on the date of the vases (pl. 69,

fig. 35) from this tomb. "The tomb at Cumae which interests you is rather difficult to date. It contains three Cretan aryballooi (pl. 69, fig. 35:3,4,5) which could as well be dated in the second half of the 8th Century as in the first half of the 7th. One oenochoe (fig. 35:6) is no doubt local and is too fragmentary. The only datable piece is the protocorinthian skyphos (fig. 35:2). It appears to me to be a type already quite well developed in comparison with the Corinthian geometric. On the other hand, it is still clearly older than the skyphoi with rows of schematic herons from the end of the 8th Century. One should then date it plus or minus 730. But unfortunately I do not know similar skyphoi with cross-ruled lozenges in a well dated context."

Hence it is probable, though not certain, that this grave belongs to the second half of the 8th Century.

Other fibulae with enlarged bows of bronze or silver and with knobs on the sides came from Stevens' excavations in the Greek cemetery at Cumae.⁶⁸ Some were found with globular aryballooi, but the accompanying vases have not been illustrated.

Evidence of still earlier use of such fibulae is being unearthed by Dr. Buchner on Ischia,⁶⁹ in the cemetery of Pithecusa, where ones with long catches and bows enlarged with pieces of bone were found with a kotyle of rounded shape like ones Miss Sylvia Benton has published from Ithaca, and which are of a shape older even than those from Cumae.⁷⁰ This would put this type and accompanying fibulae from Ischia before 750 or in the second quarter of the 8th Century. Gàbrici also placed some fibulae with enlarged bows in the group of objects from prehellenic graves excavated by Stevens at Cumae, but which were mixed together and without documentation.⁷¹

Also Gàbrici warned that not only did Stevens excavate Greek graves as well as pre-Greek ones, but he bought from dealers objects from clandestine excavations which might have been carried out anywhere. Hence the presence of these fibulae with enlarged bows in an allegedly prehellenic group of objects at Cumae is without value. It should be

⁶⁵ *Fibules grecques et orientales* (Copenhagen 1926) 200.

⁶⁶ *Die älteren italischen Fibeln* (Berlin 1943) 60-61.

⁶⁷ *MonAnt* 13 (1903) Col. 263f, figs. 44-61.

⁶⁸ E. Gàbrici, *MonAnt* 22 (1913-14) Cols. 224-229, figs. 68, 70, 71, 96, 97, 98.

⁶⁹ I am greatly indebted to Dr. Buchner for this and other important information about his finds on Ischia, partly received from him and partly transmitted through the kindness of Prof. C. F. C. Hawkes.

⁷⁰ *BSA* 48 (1953) 279-81, nos. 666 and 667, pl. 42. It may be noted in this connection that Vallet and Villard have proposed an earlier chronology for the founding of some Sicilian colonies based on historical and archaeological evidence: 757, Naxos; 757-750, the Megarians at Tretillon and Thapsos; 750, Megara; 733, Syracuse (*BCH* 76 [1952] 289f).

⁷¹ E. Gàbrici, *MonAnt* 22 (1913-14) Cols. 65, 66, 87; pls. XX:4; XXXI:1,2.

noted that the prehellenic graves at Cumae excavated by Osta and published by Gàbrici contained quite different types of fibulae (pl. 70, fig. 38) which can hardly be the ancestors of those from Greek graves. Hence it would seem that the fibulae from Syracuse represent only the latter part of a much longer story, whose earlier chapters must be sought in Greek Cumae and on Ischia as well as in Greece itself.

Blinkenberg, Sundwall and others have considered such fibulae to be Italic. Dr. Buchner first mentioned to me some years ago that they might be Greek, and Orsi suggested the same at the time of the excavations at Fusco.⁷² In this connection Miss Sylvia Benton⁷³ remarks that there are many more such fibulae that have been found in Greece since Blinkenberg made his list.⁷⁴ She would point to the fibulae from Vrokastro as their predecessors, since they have greatly enlarged bows, though the catch is still short. Fibulae of this type (pl. 71, fig. 40) came from Chamber Tombs III and IV.⁷⁵ Whatever their vague sub-Minoan to Protogeometric associations mean in date, they must be considerably older than the Italian fibulae with enlarged bows.

It remains to make the comparisons between these fibulae, which now emerge as Greek, and those found in Italy and the north.

Period III. In central Italy at this time (675-600) they were in full use among the Etruscans as can be seen in the Regolini-Galassi Tomb⁷⁶ (pl. 71, fig. 41:1), the 7th century graves at Vetusonia⁷⁷ (pl. 71, fig. 41:2,3) and Marsiliana⁷⁸ and elsewhere. But after about 600 fibulae become rare both in Greek graves and in Etruscan graves, an indication that both followed the same trends in fashion.

Such fibulae were also popular in the Arnoaldi period at Bologna⁷⁹ that represents a belated III, and these included the type with pieces of bone and amber (pl. 70, fig. 36). Still further north in the Hallstatt area they belong to Hallstatt C or the first Iron Age of central Europe⁸⁰ (pl. 70, fig. 37).

⁷² *BPI* 20 (1894) 67.

⁷³ *BSA* 48 (1953) 350-51.

⁷⁴ *Fibules grecques et orientales* (Copenhagen 1926) 200-04.

⁷⁵ E. H. Hall, *Excavations in Eastern Crete, Vrokastro* (University Museum, Philadelphia 1914) figs. 85M, 87H. V. R. d'A. Desborough, *Protogeometric Pottery* (Oxford 1952) 263-64.

⁷⁶ L. Pareti, *La Tomba Regolini-Galassi* (Vatican City 1947).

⁷⁷ I. Falchi, *Vetusonia* (Florence 1891).

⁷⁸ A. Minto, *Marsiliana d'Albegna* (Florence 1921).

⁷⁹ Montelius, pl. 83.

⁸⁰ N. Åberg, *Bronzezeitliche und frâheisenzeitliche Chronologie, Teil II, Hallstattzeit* (Stockholm 1931) figs. 6, 8.

When we go back to Period II (750-675) in Etruria, the fibulae with enlarged bows and long catches are not common, though some do occur in graves as at Tarquinia in Poggio Gallinaro 9,⁸¹ and at Bisenzio, Capodimonte 2.⁸² Here were found two bronze fibulae with bows formed of amber segments and also wooden discs covered with gold (pl. 71, fig. 39). On the whole these tombs with such fibulae probably do not precede Period III by many years.

But in Period II there are also fibulae with the same kind of enlarged bow but with shorter catches⁸³ (pl. 71, fig. 41:4-8). These are commoner than those with long catches and can be of bronze or gold or with segments of bone and amber or with a single piece of amber (pl. 71, fig. 41:8).

A Tarquinian example of bronze like fig. 41:7 came from Selciatello Sopra grave 160 (56) with a well-known Late Geometric hydria.⁸⁴ Since Period II in Etruria is that of the penetration of Late Geometric vases, it would seem that Greek fashions in fibulae were also having their effect. Those with the short catches would seem to represent the influence of the Greek fibulae with enlarged bows on the local types that had up to now had only short catches.

A precisely similar development can be seen far to the south in Calabria where the Iron Age cemetery of Canale⁸⁵ has Late Geometric vases which were for Dunbabin later than 750 but before the founding of neighboring Locri in 673.⁸⁶ Here there were fibulae with enlarged bows sometimes made of bone segments, though sometimes the catch was short. In any case this would seem to represent the appearance of new fashions in fibulae, some of which at least would be local manufactures like some of the Geometric vases. Hence Greek fashions in pottery and fibulae were taken up simultaneously as in Period II in Etruria, and the new fibulae quickly displaced the old local forms. In Calabria the older local forms of fibulae are represented at the cemetery of Torre Galli.⁸⁷ They

⁸¹ L. Pernier, *NotScav* (1907) 336, fig. 70; M. Pallottino, *MonAnt* 36 (1937-38) Col. 158.

⁸² R. Paribeni, *NotScav* (1928) 436f, fig. 4.

⁸³ For a few examples from Tarquinia see Montelius, pl. 281:14 (gold); pl. 281:16 (bone and amber segments); pl. 281:17; pl. 282:6; pl. 283:10; pl. 282:7 (amber).

⁸⁴ L. Pernier, *NotScav* (1907) 256; N. Åberg, *Bronzezeitliche und frâheisenzeitliche Chronologie, Teil I, Italien* (Stockholm 1930) 89, fig. 232.

⁸⁵ P. Orsi, "Torre Galli e Canale," *MonAnt* 31 (1926-27).

⁸⁶ T. J. Dunbabin, *The Western Greeks* (Oxford 1948) 184.

⁸⁷ P. Orsi, "Torre Galli e Canale," *MonAnt* 31 (1926-27).

resemble the fibulae of prehellenic Cumae (pl. 70, fig. 38) and also those of Period I in Etruria.

We must now trace these fibulae to northern Italy. They occur at various places, but Bologna will serve as a sample. At Bologna, Benacci I⁸⁸ contains numerous elements of Period II in Etruria and hence must be more or less contemporary with it. Elements that would belong to Period I in Etruria may represent the survival of older types in a more provincial milieu. In Benacci II there are numerous elements of Period III in Etruria as well as those of Period II. But Benacci II does not correspond in time entirely with Period III in Etruria, because the Arnoaldi Period at Bologna is also partly equal to Period III in Etruria. Hence Benacci II probably represents an overlap of Periods II and III in Etruria.

In both Benacci I and II at Bologna the fibulae with the enlarged bows are represented, and these can even have the disc-shaped foot instead of a catch (pl. 71, fig. 42:1).⁸⁹ The disc-shaped foot is characteristic of the earliest Italian Iron Age as at prehellenic Cumae and in Period I in Etruria. There are also from Bologna several fibulae of Benacci I and II with short catches and with enlarged bows (pl. 71, fig. 41:9). Sometimes the enlarged bow is made of bone or amber segments like pl. 71, fig. 41:6. There is in addition in Benacci II the type with the bow made of one big lump of amber,⁹⁰ and this carries over into central Europe in Hallstatt C or first central European Iron Age⁹¹ (pl. 71, fig. 42:2. Compare fig. 41:8 from Tarquinia).

We now go back one step further to Period I in Etruria. Here disc fibulae, serpentine fibulae with two "eyes" and arc fibulae with heavy solid bow are much like those from prehellenic Cumae (pl. 70, fig. 38).

But even here we find an occasional fibula with a disc and the greatly enlarged bow⁹² (like pl. 71, fig. 42:1). These represent a natural transition from the types of Period I to those of Period II, the new fashion combining with the old.

At Bologna the enlarged bow even appears in the period of the Savena and San Vitale cemeteries

⁸⁸ I use the terms Benacci I and II in the sense of Montelius, not of Åberg.

⁸⁹ Montelius, pl. 75:1 (Benacci I); pl. 79:1 (Benacci II).

⁹⁰ J. Sundwall, *Die älteren italischen Fibeln*, 194-95.

⁹¹ N. Åberg, *Chronologie II*, 32, fig. 38.

which are in the main equivalent to Period I in Etruria.⁹³

One may justifiably enquire at this point whether the presence of the fibulae with long catches and enlarged bows in the period 775-750 on Ischia does not mean that all related fibulae in Italy, whether in Etruria, Bologna or elsewhere, should not be dated so early instead of being placed after 750. The answer is, of course, that they may have reached the mainland of Italy that soon. But one must remember that Ostia's graves from prehellenic Cumae contained little geometric cups showing commerce with the Greeks, but none contained fibulae with long catches and enlarged bows. If the Iron Age people of Cumae, who actually lived within sight of Ischia, did not have the new fibulae, it would seem unlikely that the inhabitants of Etruria or Bologna had them at this time. Rather it would seem that this fashion in fibulae spread slowly on the Italian mainland and that the acceptance of the fibulae with the long catch was preceded by a stage in which the enlarged bow was added to fibulae that still had the older short catch or even the disc. But on present evidence this would not seem to have started until the Greek colonists had actually established themselves on the mainland about 750.

All this is of course a reversal of the usual view that all these fibulae were Italic and indeed Sundwall placed the origin of the enlarged bow in the region of Bologna. According to him⁹⁴ it would have started with fibulae with a very short catch and an enlargement of the bow. This would have been a natural local development. The longer catch would have come as a later development about 700. This was a quite natural idea until it was learned that the fully developed type with the long catch was in existence among the Greeks on Ischia even before 750. Hence we may see here the ever widening ripples of Greek fashion spreading through Italy from south to north and even reaching the Danube Valley.

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⁹² Montelius, pl. 276:9.

⁹³ N. Åberg, *Chronologie I*, 151, fig. 429. Note that his Benacci I is a stage older than Montelius' Benacci I. Åberg's Benacci II and III equal Montelius' Benacci I and II.

⁹⁴ J. Sundwall, *Die älteren italischen Fibeln*, 54, 56.

Season Sarcophagi of Architectural Type

MARION LAWRENCE

PLATES 72-79

In the church of S. Lorenzo in Panisperna in Rome is a small sarcophagus (pls. 72, 73, figs. 1-4) of architectural type with figures of the four Seasons flanking an open tomb portal. It is, as far as I can discover, unpublished. This would perhaps not be surprising in a city where ancient sarcophagi or their fragments meet you at every turn, were it not for the many careful studies made by German scholars from the days of Matz and von Duhn in 1881 to George Hanfmann's monumental book¹ published seventy years later which collects some hundred examples of sarcophagi with Seasons. Yet the sarcophagus has obviously been there for many years as it is built into the wall of the second chapel to the left of this Baroque church and legend calls it the tomb of St. Bridget. The cover is lost. It is less than adult size, smaller than the sarcophagus from Carthage (pl. 76, fig. 15) but considerably bigger than the Metropolitan one² (pl. 73, fig. 6).

The design of the front consists of a continuous arcade interrupted in the center by a gable and supported by spirally fluted columns. This is a common form among Roman columnar sarcophagi³ and, as will be seen, occurs on the majority of the examples discussed below. The architectural detail also as is usual in the western group is plain almost to the point of severity, in sharp contrast to the rich profusion of foliation on sarcophagi of Asiatic provenance.⁴ Here the low, segmental arches consist of three recessed moldings, the bases of the columns are peculiarly high and clumsy and the

capitals extremely simple, consisting solely of three horizontal moldings. The columns themselves although short and heavy have a marked diminution and even a slight entasis. Spandrels are filled with common motifs: a bird, probably an eagle, turns the corner, a basket filled with fruit at which birds are pecking is in the second and the fifth, while Satyr masks, one young and beardless, the other older and bearded, flank the central niche. Each has a shepherd's pedum behind his head, the mask at the right faces a flute. The larger object of the one at the left is less easy to identify. It is probably a syrinx or the pipes of Pan.⁵ Dionysiac symbolism is of course not surprising as it occurs frequently on the sarcophagi in combination with the Seasons.⁶

The ends of the S. Lorenzo sarcophagus are partly built into the wall but have the architectural frame of the front, a segmental arch supported, however, by a plain pilaster. The space within the niche has been left empty.

In the center of the front is a tomb portal (fig. 2). This is a common feature of the Asiatic sarcophagi of the second and third centuries where it appears on the left end, has elaborately carved horizontal moldings, and is set against, but never within, a gabled aedicula which is filled with a conch shell. The door is always closed and the panels of long, rectangular form are usually undecorated except for the moldings which frame them. Frequently, as on the Sidamara sarcophagus, a priestess, with a himation veiling her head and who

¹ *The Season Sarcophagus in Dumbarton Oaks* (Cambridge, Mass. 1951), hereafter referred to as Hanfmann.

² It is 1.50 m. long, 0.49 high, 0.24 deep (the rest is built into the wall). Measurements of the Carthage sarcophagus are 1.75 long, 0.59 high, 0.47 deep. The Metropolitan one is a front only, 1.15 long, 0.42 high.

³ M. Lawrence, "Columnar Sarcophagi in the Latin West," *ArtB* 14 (1932) 180f, hereafter referred to as Lawrence, *Col.*

⁴ C. R. Morey, *The Sarcophagus of Claudia Antonia Sabina and the Asiatic Sarcophagi, Sardis* 5 (Princeton 1924), hereafter referred to as Morey. M. Lawrence, "Additional Asiatic Sarcophagi," *MAAR* 20 (1951) 116f.

⁵ A similar juxtaposition of the mask of an older and bearded satyr with that of a younger and beardless one occurs on the Warwick vase, found in 1771 in the Villa of Hadrian, S. Reinach, *Répertoire de reliefs grecs et romains* 3 (Paris 1912) 532, no. 3. They also appear on several garland sarcophagi in

the Terme Museum, S. Aurigemma, *Le Terme di Diocleziano e il museo nazionale romano* (Rome 1946) 29, nos. 61, 62 and 65, on several more in the cloister there and on one in the Borghese Gardens. For a satyr with pedum see the statue in the Villa Albani, M. Bieber, *The Sculpture of the Hellenistic Age* (N.Y. 1955) fig. 568 and a Pompeian fresco, A. Furtwängler, "Der Satyr aus Pergamon," *Winckelmannsprogramm* 40 (1880) pl. 3, no. 4. For the syrinx see two bronze statuettes, one from Pergamon, Bieber, *op.cit.* fig. 449, and the other in Berlin, Furtwängler, *op.cit.* pl. 3, no. 5.

⁶ The Kassel sarcophagus with Dionysus riding his panther in the center is a prime example, Hanfmann, no. 461, fig. 28. See also *ibid.* no. 463, fig. 36, no. 479, fig. 38, no. 501, fig. 75, no. 501a, fig. 75a, and p. 113, ch. 2, note 44; also *BMMA* 13-14 (1955) 39-47. Three satyr masks occur under the portrait medallion on the Season sarcophagus in Pisa, Hanfmann no. 530, fig. 32.

bears a plate of offerings, stands at the left while a low tripod or lighted altar is placed in front of the door, although a camillus may be substituted for her.⁷ The Western sculptors, however, isolate the motif of the door, move it to the center of the front where it acquires a gabled top and is usually shown with the left valve ajar. Occasionally a figure is seen emerging.⁸ The panels as a rule are four in number as at S. Lorenzo and are usually decorated, sometimes as here with Medusa heads above and lions' heads with rings in their mouths, below. Both motifs are common. They probably have an apotropaic meaning, i.e. to ward off evil spirits from the tomb.⁹ A wreath with streamers fills the pediment above. Thus our tomb portal is popular iconography. It is unusual only in its squat proportions and the panels which are broader than they are high.

The four Seasons fill the niches on either side. Beginning at the left (fig. 3) a winged cupid, wearing a wreath of flowers and holding a bunch in his left hand, stands facing slightly to the right, looking out beyond the limits of the sarcophagus. He is nude except for a short chlamys, fastened by a brooch on his right shoulder and falling over his bent left arm. The right arm is broken off above the biceps. He is clearly Spring. Summer stands next, his position forming a contrapposto to the last as he glances towards a central spectator. His chlamys held by a circular brooch in the same arrangement is here thrown back and falls behind his left arm, which is broken at the elbow. The right hand is also missing but the sheaf of wheat which it held against his breast is intact. Some object, possibly an animal, occupied the lower right side of the niche. Traces of attachment appear on the marble. This Season's left upper leg and knee are

also missing. The surface of the hair is also badly damaged but he too seems to have worn a wreath. To the right of the portal (fig. 4) and also facing inward and thus balancing exactly our last cupid, Autumn stands with fruit in the crook of his arm which again, as with Spring, is covered by the chlamys, here somewhat longer. His right arm, upper leg and knee are missing and again, two bits of marble attached to the background indicate that there was something in his right hand. He also seems to have worn a wreath. Winter in the terminal niche glances to the right, thus balancing the Spring. He is completely clad, with high shepherd's boots, a short tunic and chlamys in the sling of which he held a rabbit with his right hand. The left arm which was completely free has been broken off well above the elbow but held a large bird, probably a duck. Again the condition makes it difficult to determine whether or not he wore a wreath.

Iconographically two sarcophagi are very close to our example. Both exist only as sculptural fronts. One is the well-known large relief in the Museo dei Conservatori¹⁰ (pl. 73, fig. 5); the other, from a child's sarcophagus, is now in the Metropolitan Museum of New York (pl. 73, fig. 6). They differ in architectural form. The Conservatori marble is divided into three aediculae, the New York one into five but they both separate the central gable from the adjacent arches and insert figures in the intercolumniations, thus retaining a reminiscence of the Asiatic form while the sarcophagus in S. Lorenzo, as we noted, joins the central gable to the arches. In Eastern fashion also impost blocks have been inserted above the capitals. They are lacking on our example. Here the differences between the

⁷ Morey, *passim*. Examples are Adalia, Athens A, Denizli A, Ismid, Melfi, Rome D, Rome E, Rome G, Sidamara, Uskele and Vienna. Lawrence, *Add. As. Sarc.* Ankara A, Istanbul B, Rome M, Smyrna D, Smyrna F. An unpublished Asiatic sarcophagus found in Nicaea in 1951 and now in the Archaeological Museum in Istanbul should also be added to the list. The Melfi sarcophagus is an exception in having figures on the panels of the doors. They are fragmentary but seem to be cupids in the upper row, older male figures below.

⁸ Morey 56. Florence, Baptistry (formerly in the Riccardi Palace) Lawrence, *Col.* no. 10, Morey, ill. 99; Leningrad, Hermitage, Lawrence, *Col.* no. 14, Morey, ill. 98. In both of these it is Hermes Psychopompos. An example in Capua, Museo Campana, G. Wilpert, *I sarcofagi cristiani antichi* 1 (Rome 1929) (hereafter referred to as Wilpert) p. 56, fig. 23 shows a female figure, difficult to identify but which both Wilpert and H. I. Marrou, MOYCIKOC ANHP (Paris 1938) 132 call a Shadow. She might be Persephone. Finally on a strigil sarcophagus in the Museo dei Conservatori, D. Mustilli, *Il Museo Mussolini* (Rome 1939) pl. 58, Hercules with the lion skin over his head, his club in his hand and Cerberus at his feet, emerges from a flat-topped door with plain panels. In addition to these and aside from examples illustrated in this article, the tomb portal as a central motif appears on two columnar sarcophagi in the Vatican, Lawrence, *Col.* nos. 8, 15; at Lanuvium, *ibid.* no. 4 and on a tabella one in the Terme, Wilpert, 1, pl. 131 no. 1. It is especially popular on the strigil sarcophagi of which I have counted more than twenty examples, see Hanfmann fig. 65, Wilpert, 1, pl. 131, nos. 2, 5, 6, pl. 130, nos. 1, 2, 3, H. S. Jones, *The Sculptures of the Palazzo dei Conservatori* (Oxford 1926) pl. 95, no. 92.

⁹ Both the sarcophagi with Hermes in the door (Florence and Leningrad, see note 8) and one in the Vatican Belvedere, Lawrence, *Col.* no. 15, show this combination. See Jones, *op.cit.* 49 for the apotropaic meaning.

¹⁰ Lawrence, *Col.* no. 9, Jones, *op.cit.* 49, pl. 17, Hanfmann, nos. 336, 448, 462, figs. 14, 33. Of Luna marble, 2.39 m. long, 1.04 high.

three sarcophagi become more marked than the similarities. Tritons and sea-monsters in the spandrels,¹¹ the Seasons on the panels of the doors, the composite capitals with their spoon leaves and finally the extremely slender columns of the Conservatori sarcophagus have nothing in common, beyond their spiral fluting, with the one in S. Lorenzo. The four Seasons are winged like ours but are older youths and singularly svelte with a long-legged grace. They all wear the chlamys exactly alike. It dips to a central V like a collar or a sailor's tie and is fastened above the breastbone with a brooch. Medusa heads, the two central ones full face, the two at the ends in profile, decorate these brooches. The Seasons all gaze towards the center, their monotony relieved only by an alternation in their stance and the attributes they carry. Their hair is worn long and curly, tied in a small tuft above the center of the forehead, this projects up over the flat archivolt of the arch which is even more segmental than on the S. Lorenzo sarcophagus although here also we find the heads of the Cupids impinging on the architectural frame. The sequence also is different as it runs from the left, Spring, Winter, Autumn and Summer, thus as Jones pointed out, placing the two which mean death closest to the tomb portal. Additional symbolism occurs in the statuette of Fortune holding a steering wheel in one hand, a cornucopia in the other, in the intercolumniation at the right and on a similar pedestal at the left, a male togatus officiating at a burning altar. He is probably the genius of the dead man. Both personifications are crowned by winged victories. The symbolism is thus most elaborate. The style is equally refined but with an "effete delicacy" as Hanfmann describes it.¹² I believe that he is correct in dating the sarcophagus as c. 240 A.D., and comparing the figure style with that of the Dionys-

iac one with the Seasons in Kassel and the fragmentary front in the Belvedere of the Vatican which is even more closely related.¹³ Here not only is the architectural form repeated almost identically and the open grave portal decorated with the four Seasons but the standing nude youths or genii in the interstices are so close in proportions and anatomical rendering, in the treatment of the hair and the symmetrical collar-like chlamys, as to lead to the conclusion that they are products of the same workshop.

The fragmentary front in the Metropolitan Museum¹⁴ (fig. 6) is much cruder. Unlike the other two sarcophagi, the Seasons are here placed on high pedestals like statues, the columns are unfluted, the arches above much less segmental and the capitals, composite like our last example, are hardly more than blocked in. The spandrel ornaments also differ as there are masks in four of them, two flying figures, victories(?), holding a swag in the central ones. A standing nude youth with a basket of fruit on his head stands in the intercolumniation at the right and the restorer is probably correct in repeating him or a similar figure at the left. The tomb portal is much clumsier; almost half its height is taken up by the entablature and heavy gable. The door itself is almost square and has four lions' heads on the panels. The Seasons repeat the sequence of our S. Lorenzo example but here the similarity ends. All are nude except for the chlamys which is arranged diagonally across their chests to balance the direction of their glance, a rhythm carried further by the alternation in their stance. Each looks towards the neighbouring one and each has a seasonal animal at his feet. They are without wings and the hair is in locks rendered by large drill holes and grooves. The style is coarse and quite careless but does not indicate a late date.

¹¹ Jones, *op.cit.*, thinks the central figures, youths whose bodies end in fish tails, are the mystic escort for the dead across the river Oceanus. On the borders of each of the doors below are six heads, at the top and bottom lions, in the center female ones which, although they lack the usual wild locks, he calls Medusa and believes were placed there to ward off evil spirits from the tomb.

¹² Hanfmann 34, Jones says "Antonine or later." All the noses on the Conservatori example have been restored. At Kassel the faces have been tampered with and that of Summer restored. Hanfmann no. 461, figs. 20, 28.

¹³ Lawrence Col. no. 8, W. Arnelung, *Die Skulpturen des Vaticanischen Museums* (Berlin 1908) 2, no. 60, p. 153, pl. 17, P. Gusman, *L'art décoratif de Rome* (Paris 1910) 2, pls. 108, 109, Hanfmann nos. 315, 337. It is interesting to note that Panofsky, *ArtB* 19 (1937) 579, has shown that Michelangelo was influenced by this sarcophagus in his project of 1505 for

the tomb of Julius II; compare figs. 2, 3, and 9, where the "door of Death" is flanked by nude figures in much the same pose and standing on socles with busts of other figures emerging above them. See also E. Panofsky, *Studies in Iconology* (N.Y. 1939) 198, note 78.

¹⁴ Lawrence Col. no. 41, C. Alexander, *MMS* 3 (1930) 44f, fig. 15, Hanfmann no. 490, fig. 56. Obviously for a child, it measures 1.15 m. long, 0.42 high. A large section at the left of the tomb portal including the whole of the figure in this interstice, the pedestal under Summer and the fore-body of his animal, are restorations. I see no relationship either with architectural form or figure style with the cinerary urn (not sarcophagus) in the Vatican, F. Cumont, *Recherches sur le symbolisme funéraire des Romains* (Paris 1942) 307, pl. 30, no. 1, close enough to warrant Hanfmann's suggestion, 2, p. 25, note 92, that they may have been produced by the same workshop. The restored part in the Metropolitan has recently been removed.

Probably with details picked up in color it originally looked much better than it does now and children's sarcophagi are frequently of less careful workmanship than adult ones. I consequently agree with Prof. Hanfmann and Miss Alexander in considering it to be of the late third century.

It is clear that these three sarcophagi have little in common beyond their use of an architectural frame and similar iconography. Except for the very late sarcophagus at Ampurias (pl. 78, fig. 29) they are the only examples I know where one finds the juxtaposition of the tomb portal with the Seasons although it is perhaps a natural one and reliefs of the Seasons occasionally appear on the panels of the door itself as on the Conservatori sarcophagus and the Vatican one which belongs with it.¹⁵ The door is clearly the "door of Death," a meaning confirmed by the emerging figure of Hermes Psychopompos on two examples, Hercules with Cerberus at his feet on a third.¹⁶ The Gate of Hades or the door through which the dying soul must pass has a long history in both classical and Christian thought.¹⁷ The imagery is used in both the *Iliad* and the *Odyssey*.¹⁸ Aristophanes has Dionysus knock at Pluto's gate in the *Frogs*, Sophocles speaks of the watchdog of the Gates of Hell to which Theseus is led by Oedipus and Virgil describes the many monstrous forms at the doors through which the Sibyl leads Aeneas to the Underworld.¹⁹ Theocritus alludes to the Gates of Hades in Idyl 2.²⁰

¹⁵ As Hanfmann points out this iconography occurs on the marble door of a tomb in Ostia of the late second century, nos. 333, 375, 447, fig. 129. On sarcophagi aside from the two mentioned above, there are two examples, not one, in the Campo Santo at Pisa, Hanfmann no. 316, fig. 65, P. Lasinio, *Raccolta di sarcofagi, urne e altri monumenti di scultura del Campo Santo di Pisa* (Pisa 1814) pl. 21, no. 73; pl. 145, no. 51, German Arch. Inst. Rome, photo. 1934: 688, 689. The second one is also a strigil sarcophagus but with a wreath with streamers in the central gable and columns instead of figures at the ends. The shape of the panels of the doors is also different, on the latter they are much squarer and the figures are very much abraded.

¹⁶ See note 8.

¹⁷ E. H. Haight, *The Symbolism of the House Door in Classical Poetry* (N.Y. 1950). As far as I know the illustrated monograph which the author promises on the last page has yet to appear. I am indebted to Miss G. M. A. Richter for drawing my attention to this book and for many other helpful suggestions.

¹⁸ *Iliad* 5.646, 9.314; *Odyssey* 14.156.

¹⁹ Loeb editions. Aristophanes, *Frogs* line 163; Sophocles, *Oedipus at Colonus* line 1569; Virgil, *Aeneid* 6.286.

²⁰ *Idyl* 2.144-160.

²¹ *The Greek Anthology*, 2, Julianus of Egypt (6th century A.D.) no. 70; Bassus Lollius (6th century A.D.) no. 391.

²² E. H. Haight, *Aspects of Symbolism in the Latin Anthology and in Classical and Renaissance Art* (N.Y. 1952) 4. St. Matthew 16.18.

Later Greek sepulchral Epigrams also use the imagery.²¹ It appears in the Latin Anthology and we find it of course in the Bible where they have become Gates of Hell.²²

In the visual arts, the history is even longer. It can be traced back to the false door inside the Egyptian tomb chamber in mastabas of the Old Kingdom, a door beside which figures of the deceased stand and before which offerings were placed. Probably there is no connection between these and the doors painted in Etruscan tombs.²³ On Etruscan urns and sarcophagi, Roman sepulchral altars and cinerary urns, the motif of the tomb portal is a common one.²⁴ Two altars are particularly interesting, one in the Vatican where Victories standing on the angles of the corners hold the handles of a partly opened door and the other in Copenhagen, which shows the marriage pair standing inside a wide open gate. Here the doors are decorated on the inside with lions' heads.²⁵ From this rich inheritance the sculptors of our sarcophagi drew and it is not surprising they found the motif full of meaning. In Christian times it lost its popularity and the grave portal disappears except when identified with the sepulchre of Christ.²⁶ Occasionally a door occurs in the Last Judgment as in the Liber Vitae or on the tympana at Autun and Conques where it is combined with the more usual form of the monster's jaws.²⁷ The tomb portal for an individual's use was revived first by Michelangelo

²³ F. Poulsen, *Etruscan Tomb Painting* (Oxford 1922) figs. 3, 7, 8, 46, 47; M. H. Swindler, *Ancient Painting* (New Haven 1929) fig. 587. A Roman fresco of the first century A.D. shows an open gate guarded by Cerberus and a "janitor" with Orpheus and Eurydice within.

²⁴ W. Altmann, *Die römischen Grabaltäre der Kaiserzeit* (Berlin 1905), 16ff, fig. 11. For examples from the eastern Mediterranean see pp. 14-15, figs. 8, 9, 10. The latter, a grave altar from Alexandria, shows the door partly open. See also H. Hofmann, *Römische Militärgrabsteine der Donauländer*, Sondersch. Oesterr. Arch. Inst., Wien 5 (1905) 54f, figs. 36, 37, 61.

²⁵ Altman, *op.cit.* 101ff, fig. 85; 153, fig. 125. Haight, *Aspects* 34, also mentions this altar in the Vatican, *CIL* VI, 15699, Ameling, *op.cit.* 2, pl. 21, no. 80.

²⁶ The Index of Christian Art lists only three examples: two of the strigil sarcophagi mentioned above in note 8 (Wilpert, 1, pl. 130, no. 1, 2) which are identified as Christian solely because a Good (?) Shepherd also appears, and the sarcophagus in Spalato, Lawrence, *Col.* no. 6 and Lawrence *AJA* 32 (1928) 431, fig. 12, Wilpert 1, pl. 132, no. 2, where the tomb portal appears on the end.

²⁷ *Schools of Illumination: Reproductions from Manuscripts in the British Museum* (London 1914) 1, pl. 13; J. Baum, *Romanesque Architecture in France* (London no date) pls. 179, 78.

in his project of 1505 for the tomb of Julius II²⁸ and later brilliantly used by Bernini in the tomb of Alexander VII.

The four Seasons also are popular imagery. Ovid, Horace and Seneca speak of the eternal cycle. "All things are changing, nothing dies. . . . There is nothing in all the world that keeps its form. All things are in a state of flux. . . . Time itself flows on in constant motion, just like a river. . . . The spent days speed on to dawn. . . . The sun's bright rays succeed the darkness of the night. . . . Then again do you not see the year assuming four aspects in imitation of our own lifetime? For in early Spring it is tender and full of fresh life, just like a little child," etc. etc. (Ovid). Or "The cold gives way before the zephyrs; Spring is trampled underfoot by Summer, destined likewise to pass away as soon as fruitful Autumn has poured forth its harvest and lifeless Winter soon returns again" (Horace). Or "Summer has gone but a new year will bring it again; Winter lies low but will be restored by its own proper months; night has overwhelmed the sun but the day will soon rout the night again" (Seneca).²⁹ Ovid, as we saw, drew a further simile between the Seasons and the four ages of man.³⁰ This, however, is never illustrated by the sarcophagi at least, where the Seasons, whether children or youths, are in an ideal state of vigor. Pagan thought may also have interpreted them as symbols of rebirth or immortality. The evidence is not clear although Christian writers make this analogy.³¹ As Hanfmann has pointed out the Seasons also are bearers of annual or seasonal sacrifices. The "fruits" of each Season were brought to the tomb in Greek times as well as in Roman. Their artistic equivalents appear on the urns and sarcophagi of the latter, and the Seasons decorate as well the walls, floors

and ceilings of the tombs where we see them bearing these seasonal gifts. The meaning seems to be "idyllic, peaceful rest, and a pleasant memorial adorned by nature" to which, as a Latin epitaph describes it, the Seasons each bring their own pleasures and presents.³² Another meaning that is well substantiated is that they are symbols of the passing of time. An inscription from Narbonne laments "Only three times had the rose (Spring) the corn (Summer) and the wine (Autumn) appeared when Festa, married to Gregorius . . . was buried."³³

The earliest certain representations of the Seasons in funeral art, according to Hanfmann, are the fragments of a relief on the tomb of Clodia Publi Liberta in Roccagiovane of the 1st century A.D.³⁴ As they are female Seasons dancing, they need not concern us here. His earliest examples of male Seasons are those on the Arch of Trajan at Benevento³⁵ (117-120 A.D.). The sculptured relief of the tomb of the Haterii, a medallion of Hadrian, coins, and the Seasons under the victories on the Arch of Septimius Severus show the growing popularity of the theme.³⁶ In the third century Season sarcophagi appear in great numbers of which our architectural type is but one subdivision.³⁷ In contrast to other groups, the Seasons here are represented standing in statuesque fashion holding their attributes as opposed to those engaged in seasonal activities or running, walking or dancing as on the frieze sarcophagi. Although the architectural form in the final analysis is due to Eastern inspiration, it is usually treated in a Western manner and the male Seasons themselves are Roman iconography, as Hanfmann's list clearly demonstrates.³⁸ Furthermore, no Asiatic sarcophagus among those so far discovered has figures which can be identified as

²⁸ See note 13.

²⁹ Ovid, *Metamorphoses* 15.176-213; Horace, *Carmine*, Book 4, Ode 7, lines 9-12; Seneca, *Epistles* 36.11.12.

³⁰ Ovid 15.199-213.

³¹ The literary and epigraphical evidence is summarized by Hanfmann 120-127, 190ff. See also the discussion by Cumont, *op.cit.* 490 and by Leclercq in F. Cabrol, *Dictionnaire d'archéologie chrétienne, et de liturgie* 15, 1 (Paris 1950) cols. 573f. As Hanfmann points out, 84, note 265, it is a complex and difficult question. A. D. Nock, *AJA* 50 (1946) 140-170, in discussing Cumont, notes (p. 148) that "the themes of (Roman) imperial funerary art are nearly all themes of ordinary decorative art and there is very little here peculiar to the world of the dead (contrast Egypt). Erotes, who appear on the sarcophagi, whether in action or as baby caryatids bearing garlands, Eros and 'Psyche,' Dionysiac scenes, rites of Demeter, Seasons, seascapes, Endymion, these are the stock in trade of secular art." "Our sarcophagi have their own

modest but conscious monumentality. Here, as in all other ancient art and its Coptic sequel, we must not forget the primary purpose, to vary and diversify, ΠΟΙΚΙΛΛΕΙΝ. You achieved that with adjuncts which seemed appropriate."

³² See the epitaph given in Latin by R. Lattimore, *Themes in Greek and Latin Epitaphs*, Illinois Studies in Language and Literature, no. 28 (1942) 136, translated by Hanfmann p. 186.

³³ *ibid.* 187; *CIL* XII, no. 5350.

³⁴ Hanfmann no. 116, figs. 83, 84, p. 125f. The monument of Concordii at Boretto no. 115, fig. 85, is perhaps even earlier.

³⁵ *ibid.* no. 307, figs. 123, 124.

³⁶ Haterii, *ibid.* no. 323, fig. 130: medallion of Hadrian, no. 318, fig. 127: other coins and medallions, nos. 324-329; Arch of Septimius Severus, no. 311, figs. 22-24.

³⁷ For a discussion of their origin and the limitations of the term *ibid.* 21-23.

³⁸ For an analysis of the geographical distribution and a discussion of the origin *ibid.* 17, 18.

Seasons.³⁹ As with the tomb portal, the triumph of Christianity marks a rapid decline in the use of the Seasons. Although a few sporadic examples linger on, they gradually disappear from funeral art.

To return now to the sarcophagus in S. Lorenzo, it is apparent that neither the front in the Conservatori nor the fragment in the Metropolitan Museum can help us to determine its date. We must work from the evidence of the architectural detail and of the figure style. The former has already been discussed. The severe, recessed moldings of the segmental arches and the simple capitals give us little specific data. Similar architectural treatment occurs from the middle of the third century through the early years of the fourth.

The figure style of the Seasons, Medusa heads and lions, is more indicative. Here are young, rather chubby children with small softly feathered wings in contrast to the older youths on the two other sarcophagi. The anatomical rendering, while not too specific, is essentially correct. The little bodies are solid and yet at the same time with a surface softness, their stomachs slightly protruding, the thighs and knees with wrinkles of fat, the hands and feet small. Their faces, which all have a family resemblance, show a high forehead, eyes set in a shallow socket, but most noticeable of all, heavy, drooping cheeks and a small pointed chin, the mouth in a downward crescent. The noses are injured but seem to have been rather flat. The pupils of the eyes are drilled but there is only a moderate use of the drill in the soft locks of the hair. With a style so marked it would seem easy to find parallels. Just the opposite is the case. They seem, however, to have been inspired by the Seasons on the Arch of Septimius Severus, compare particularly Autumn and Summer.⁴⁰ Here although the children are a few years older and consequently have longer legs, we see the same small feathery wings, the same rather square face and the same drooping crescent mouth, although the chins are squarer. Of the Season sarcophagi, the one in Buffalo from the vicinity of Florence comes closest in style.⁴¹

³⁹ The sarcophagus in Providence is a possible exception but the identification of the caryatid figures at the corners as Seasons seems very doubtful. *ibid.* no. 313, J. D. Young, *ArtB* 13 (1931) 138ff, G. Rodenwaldt, *IHS* 53 (1933) 200.

⁴⁰ Hanfmann no. 311, figs. 21-24.

⁴¹ *ibid.* no. 435, fig. 39.

⁴² *ibid.* no. 529 (372), fig. 30.

⁴³ *ibid.* no. 465, figs. 15, 34.

⁴⁴ Formerly in the Palazzo Altemps, *ibid.* no. 491, fig. 60. Hanfmann's dating of this example seems to me to be too late.

Here are children of approximately the same age. They have wings rendered with a little more detail and slightly longer. The bodies are more summarily treated but the chubby faces have heavy cheeks, small pointed chins and drooping mouths. The technique used for the hair, however, is quite different as the locks are punched with many round drill holes and the folds on the chiton of Winter also are more coarsely grooved. The Buffalo sarcophagus has been dated by Hanfmann as between 250 and 260. The sarcophagus in S. Lorenzo, I believe, cannot be much later. Other comparisons can be made which bear this out. The very young and active putti on a sarcophagus in the Palazzo dei Conservatori which has been dated c.240 look earlier although they have some affinities with our style.⁴² Slightly later than this comes one in the Louvre (240-250) with older standing putti.⁴³ Finally the sarcophagus in the Seminario Spagnuolo in Rome shows a later version of our style; the figures of Winter especially should be compared.⁴⁴ This is to be placed, I believe, towards the end of the third century.

Also belonging to the architectural type but of a little later date, is the Season sarcophagus in the Villa Savoia in Rome (pl. 74, figs. 7-10). This was described many years ago in Matz and von Duhn's catalogue as in the Villa Ludovisi but like a number of the less important items in that collection was not taken to the Terme Museum and Hanfmann, following Cumont, lists it as present location unknown.⁴⁵ It is a trough which has lost its cover but is otherwise complete except for minor injuries here and there.⁴⁶ Very badly weathered, the marble is crumbly and friable and has evidently been outdoors, completely unprotected, for many years.

A series of flat segmental arches interrupted by a low gable in the center repeats the architectural design of our first example. The moldings differ slightly as here there is a larger central torus and the heads of the figures are well below the arches and do not impinge against them. Capitals are more

⁴⁵ F. Matz u. F. von Duhn, *Antike Bildwerke in Rom* (Rome 1881) 2, 298f, no. 3009, Cumont *op.cit.* 165, Hanfmann no. A 2. I am indebted to Professors Hanfmann and Matz for the present location of this piece.

⁴⁶ It is 2.16 m. long, 0.58 high, 0.59 deep. There is a continuous horizontal break from the second niche through the fourth above the level of the ankles. A large section of the lower part of the fifth niche is gone as well as the face of the central woman and the right leg and foot of the central man.

elaborate. They are composite with three spoon-shaped leaves and drooping volutes and should be compared with those of the Season sarcophagus in the Palazzo dei Conservatori (pl. 73, fig. 5) and its companion piece in the Vatican. Our capitals omit the central boss or rosette from the abacus and although there is an impost block above, it is a single cavetto molding and consequently simpler. Slender fluted pilasters replace the spirally fluted columns of our other examples. These are very close, however, to those on a five-arch sarcophagus in the Palazzo Mattei (pl. 74, fig. 11) which has capitals slightly simpler than ours and inserts bases under the two groups at the ends, very much as bases are put in all the niches of the sarcophagus in the Villa Savoia. These variations in architectural form and the occasional insertion of pedestals which make the figures seem even more like statues, mark the Western columnar sarcophagi, as I have shown elsewhere.⁴⁷ The designs in the central spandrels also present a marked comparison with the Mattei sarcophagus. Here winged female figures blow on long, twisted horns. These are not the tritons of the Conservatori example but winds blowing on a sea shell and are a fitting accompaniment to the Seasons below.⁴⁸ The second and fifth spandrels have half figures of Victories writing on shields (fig. 9) and the terminal ones, although very abraded, can be identified as deer being devoured by lions, whose heads only are visible from the front, their bodies appearing on the ends of the sarcophagus (fig. 10). The latter are carved in much flatter relief, as is usual on Latin sarcophagi when the ends are decorated at all, and show two winged putti holding short but thick garlands with fluttering streamers.

The Seasons on the front are wingless and paired as on the Metropolitan example, each facing slightly towards his neighbour. Here, however, the similarity ends. Beginning at the left, Winter in a short sleeved chiton and with high leggings or boots, wears his chlamys draped around his neck and over the back of his head. It falls in a wide fold over the left arm. He held an olive branch and two ducks in his right hand which is broken; an unidentifiable

object of which only traces remain, was in his left. Three reeds grow from the pedestal below it. Next to him Spring also wears a tunic but draped so that it leaves the right shoulder and breast bare. He wears a wreath of flowers, today much weathered, and has bare feet. He held a lionskin and a somewhat high object, possibly a basket, in his outstretched right hand, a rearing goat with his left. A tree appears behind this and flowers grow from the pedestal at his right. Summer and Autumn are nude except for chlamydes which are draped diagonally across their chests to continue the rhythm of their glance, a symmetry which is carried still further by the two large baskets they hold with the inner arm. Both seem to have worn wreaths, one of corn, the other of grapes. A bull and three stalks of a plant flank the figure of Summer, an overturned basket and grapevine that of Autumn (fig. 9).

In the central niche are a man and a woman who undoubtedly are to be identified as the marriage pair (fig. 8). They at the same time have a mythological meaning. The woman stands with one foot raised on a rocky mound, her left knee bent. She is fully clothed in a chiton over which is a voluminous mantle which falls in a cascade over her breast and outstretched left arm and is brought horizontally across her thighs, falling in many diagonal folds. Her right arm was also held out but has been broken off near the elbow. Her face and all but the line of the back of the head is also gone. She is, however, clearly in the position of the Venus of Capua, a popular type of which we have a dozen or more copies or variants, among them the Aphrodite of Melos.⁴⁹ Many of these show Venus clothed as here with both chiton and mantle. A fragmentary monster (fig. 8) with lion's paws whose serpent-like body ends in a dolphin's or fish's tail also bears out this identification although the neck and head are missing. Seated at the right is the figure of a stalwart and mature man who is nude except for a cloak on which he sits and which is draped across his lap. His arms were held away from the body but are both broken near the elbow. His hair

enwaldt, *op.cit.* 22, fig. 5.

⁴⁷ Lawrence Col. 160-161. The five-arch sarcophagus in Ferentillo is a good example of these pedestals, *ibid.* no. 35. G. Rodenwaldt, *RM* 38 (1923-24) 22, fig. 10. Four of our bases are slightly circular, and should be compared with two of those on the Hercules sarcophagus in London, Morey ill. 92. High, clumsy pedestals it will be remembered appeared under the Seasons on the Metropolitan sarcophagus (fig. 6).

⁴⁸ Wind gods with similar long horns appear on the five-arch Marriage sarcophagus in Pisa, Lawrence Col. no. 37, Rod-

⁴⁹ H. Brunn u. F. Bruckmann, *Denkmäler griechischer und römischer Sculptur* (Munich 1888) pl. 297; A. Furtwängler, *Masterpieces of Greek Sculpture* (London 1895) 384ff, fig. 170; S. Reinach, *Répertoire de la statuaire grecque et romaine* (Paris 1897) vol. 1, p. 319 no. 2; vol. 2, p. 338, nos. 1-6, 9. This pose is the same as that of the Nike of Brescia to which this figure has been likened by all the early scholars.

falls in long curly locks and he is bareheaded. Unfortunately there are no attributes to identify him with certainty. A rough mass of stone at the right has lost all of the surface except for the right contour. Is this simply a piece of drapery or could it have been a helmet? There is also a curious curved object behind his head and above the left shoulder which flares out slightly towards the end.

The appropriate companion for Venus is either Mars or Adonis. The latter appears on a frieze sarcophagus in the Lateran and is easily recognized, as a Cupid is tending to a wound on his right leg.⁵⁰ Like the man on the Villa Savoia sarcophagus, he is nude except for some drapery across his legs, although his companion, a seated woman, is completely clothed and carries a regal scepter. Both have portrait heads, markedly different from the Venus and Adonis who appear in an earlier scene on this same sarcophagus. So here the double meaning of the mythological pair and the Roman couple interred in the sarcophagus seems certain. We have other convincing evidence that this was a rather common practice among the Romans.

A number of groups of Mars and Venus have survived of which the heads are clearly Roman portraits. One in the Louvre shows Hadrian as Mars, nude but wearing a helmet, Sabina as Venus, and another group in the Terme Museum represents Commodus and Crispina in the same fashion. Similar couples but where the portraits are not identifiable exist in the Capitoline Museum, in the Villa Borghese, in Florence and at Ostia.⁵¹ There were probably many more. In any case the woman who may or may not be wearing a chiton is in the pose of the Venus of Capua, the man wears a

⁵⁰ C. Robert, *Die antiken Sarkophagreliefs* (Berlin 1897) vol. 3, 2, pl. 5, no. 21. P. W. Lehmann, *Roman Wall paintings from Boscoreale in the Metropolitan Museum of Art*, Monographs on Archaeology, Arch. Inst. Am. 5 (1953) fig. 30. Very little is visible of the coiffure of the central woman, it has been compared with that of Julia Maesta but this sarcophagus is probably of the first third of the 3rd century.

⁵¹ Louvre: E. C. de la Ferté, *GBA* 43 (1954) 219, fig. 13. Terme: Aurigemma *op.cit.* no. 108522, p. 30, no. 69, G. M. A. Richter, *Proc. Phil. Soc.* 95 (1951) 184f, fig. 14. Capitoline: H. S. Jones, *The Sculptures of the Museo Capitolino* (Oxford 1912) 297-298, pl. 73, Reinach, *Rep. Stat.* 1,346, no. 4, Richter, *op.cit.* fig. 15. Villa Borghese (statuette): J. J. Bernoulli, *Aphrodite* (Leipzig 1873) 163, A. Furtwängler *op.cit.* 384, note 6. Florence: Reinach *op.cit.* 1,346, no. 6, Alinari photo. 1430. Ostia: Reinach *op.cit.* V, 165, no. 1, *NSc* (1920) 61, fig. 11. The statuette group in the Chiaramonti is a pastiche of three statues which do not belong together. Amelung, *op.cit.* 1, no. 627, p. 731, pl. 78. A fragmentary torso of Mars also in the Chiaramonti *ibid.* no. 370, pl. 58 is listed by Bernoulli 164 as no. 6. For the Borghese Mars see de la Ferté *op.cit.* fig. 10.

helmet and is the type of the Borghese Mars. Similar groups also appear on the sarcophagus. One of these is in the central niche of the five-arch sarcophagus in the Palazzo Mattei (pl. 74, fig. 11) with which we have compared our architectural details. Other examples are strigil sarcophagi or fragments. There is one of these in the Campo Santo at Pisa, one owned by the Duc de Mouchy (Oise), one found on the Via Salaria, others in the Villa Albani and the Villa Doria Pamphili and three more listed by Matz and von Duhn.⁵² Again Mars always stands, wears a helmet, and frequently holds a shield and other weapons. The sarcophagus in the Villa Savoia thus does not fit in with this popular type since our man is seated and is bareheaded. A well-known statue, however, shows the god in this form. The Ludovisi Mars, now in the Terme, is a man with close cropped, curly hair, who sits on a rocky mound, nude except for drapery across his lap.⁵³ Here there are plenty of attributes to confirm the identification. He holds a sword; shield, helmet and an Eros are beside his feet. On the top of the left shoulder, however, is a mass of marble with a dowel hole. This is inexplicable except as evidence of another figure. It may have been the hand of Venus.

Thus the central group of the sarcophagus in the Villa Savoia is probably to be identified as the marriage pair represented as Mars and Venus. Earlier scholars have suggested Dionysos, an attribution which can be dismissed since the woman is clearly Venus and not Ariadne, the beast a sea-monster, and the enigmatical mass of marble at the right could not possibly have been a panther since there are no legs. Adonis on the other hand

For a discussion of married couples represented as Mars and Venus in the Renaissance see Panofsky, *Iconology* 163f.

⁵² Campo Santo, Pisa: Lasinio *op.cit.* pl. 91, no. 21, Germ. Arch. Inst. photo. 1924-610. Duc de Mouchy: de la Ferté *op.cit.* 217f, figs. 11, 12. Via Salaria, Rome: *NSc* (1908) 459f, fig. 1. Villa Albani, Rome: Alinari photo. 27556. Villa Doria Pamphili, Rome: Germ. Arch. Inst. photo. 1933-987. Villa Pacca, Rome (formerly) Matz, von Duhn, 2, no. 2231. Villa Giustiniani, Rome: *ibid.* no. 2232, Bernoulli *op.cit.* 164 no. 10. Palazzo Colonna, Rome: Matz, von Duhn, 2, no. 2233. They add "Like the former but perhaps modern." Bernoulli *op.cit.* no. 9. The group also appears on a frieze sarcophagus in the Museo di Roma. Mars and Venus, both seated, but the latter at the right and turning away from Mars, occur in the center of several frieze sarcophagi, Robert *op.cit.* III, 2, pl. 62, 62A. There is also one in Grottaferrata, Germ. Arch. Inst. photo. 1932-358. These seem to have no connection with our type.

⁵³ Aurigemma *op.cit.* no. 8602, pl. 71. A replica of this type is in the Naples Museum but it is too fragmentary to help us. See Bieber, *op.cit.* 41.

is possible although the heavy musculature of the body would rather indicate Mars. A similar group appears in one of the Boscoreale frescoes in the Metropolitan Museum where a large, heavily draped woman sits beside a nude man. Mrs. Lehmann has argued an elaborate case for Venus and Adonis but says in the footnote that it is conceivable that the mortal owners of the Villa were to be identified with the two gods.⁵⁴ Other scholars, Pfuhl and Bieber, believe them to be members of the Roman family, still others, Studniczka, Rumpf and Robertson, interpret them as historical figures.⁵⁵ Here also there are no attributes except for the long lance held by the man. His head is almost obliterated, the woman is matronly and clearly a portrait. Mars and Venus appear elsewhere in Pompeian painting but the examples do not help us much. Two of these frescoes where the identification is certain show Venus semi-recumbent in the lap of Mars, a third, which is called Mars and Venus, has no attributes and may simply represent a pair of lovers.⁵⁶

The extremely weathered condition of the Villa Savoia sarcophagus makes stylistic analysis more difficult than with our first example. Here also there is comparatively little use of the round drill. The bodies are well proportioned and solid, the drapery of Venus retaining much of its original fluency. A date in the third quarter of the third century thus seems to be indicated, a conclusion borne out by the close comparison of the architectural detail with the five-arch sarcophagus of the Palazzo Mattei (pl. 74, fig. 11).

A second architectural Season sarcophagus which was believed to be lost is the one today in the Cemetery Rehalp, Zurich (pl. 75, fig. 12). This is described by Matz and von Duhn as in the Villa Pacca in Rome; it reappeared when the Trau Collection from Vienna was auctioned off in Lucerne in 1954.⁵⁷ Three years later it was bought by Mr. Werner Cominx of Zurich for his father's tomb. Like the examples in the Villa Savoia and S. Lorenzo, it has a continuous arcade, interrupted in the center by a gable. Spirally fluted columns, seg-

mental arches with recessed moldings, and low but widely flaring capitals are close parallels to the ornament of the latter, although some differences occur: the low bases of the columns, and the more sharply pointed gable. The spandrels are decorated also with very flat reliefs, a half-palmette at the corners, cornucopias are in the next, with a curling wave pattern in the center, a fitting accompaniment to Venus who stands below. The ends of the sarcophagus are undecorated. Unlike most members of the group this tomb retains its cover. This shows masks at the ends and four flying cupids holding garlands and a central tabella which is today blank. The design is rather surprising in its delicacy and the skill with which it is handled.

The four Seasons are winged as on the sarcophagus in S. Lorenzo and the Conservatori but are somewhat older children than the former, although not yet the youths of the latter. They repeat the sequence, Spring, Summer, Autumn and Winter, of our first example but like the sarcophagus in the Villa Savoia and the front in the Metropolitan are paired, the terminal ones glancing inwards towards the center, the inner ones out towards the ends, a rhythm repeated in the alternation in pose. Spring and Summer are completely nude. The former holds a wreath in his right hand, a large basket of flowers in his left, the latter has an object that is probably a small sheaf of wheat and a large sickle. Autumn wears a chlamys draped around his neck and has a small pruning knife in his right hand. His left arm hangs down and whatever it held is injured. Matz and von Duhn interpreted this as a bunch of grapes. Winter is warmly dressed with boots and high leggings, a long-sleeved tunic and a hood over his head. He is carrying a large branch (a reed?) and a duck.

In the central aedicula, in a slightly smaller scale, stands a charming svelte figure of Venus, again, I believe, a portrait of the deceased. She is nude to the hips, her himation held behind her right shoulder by her upraised hand falls vertically and then in an oval curve across her body supported on the other side by her left forearm. She holds an apple

three examples are today in the Naples Museum.

⁵⁴ Lehmann *op.cit.* pls. 4, 5, pp. 30f, p. 43, note 60.
⁵⁵ For a summary of the controversy and bibliography see M. Bieber, *AJA* 60 (1956) 283-284.
⁵⁶ From the House of Mars and Venus, L. Curtius, *Die Wandmalerei Pompejis* (Leipzig 1929) pl. 1: Casa degli Epigrammi, B. Neutsch, *Jb. arch. Inst.* 70 (1955) 179f, figs. 20, 21: House of Meleager, W. Helbig, *Wandgemälde der von Vesuvverschütteten Städte Campaniens* (Leipzig 1868) 81 no. 314, H. Roux, *Herculaneum et Pompeii* (Paris 1840) 8, pl. 15. All

⁵⁷ Matz and von Duhn 2, p. 299, no. 3010, Hanfmann A 1. The former gives a full description including the cover, but states that there is an arch over the central niche, triangular pediments over the others, a mistake which led Hanfmann p. 24 to cite it as the sole example of this design. *Art News* (Nov. 1954) 12, small photograph. I am indebted to Professors Hanfmann and Matz for drawing my attention to this last reference. It is of adult size, 2.20 m. long, 0.85 high, 0.75 deep.

in this hand. A dolphin is at her feet in much the same position as with the Venus of Cyrene, where however it is at her right.⁵⁸ She is perhaps a variant of the Venus of Arles whose right arm is restored and should be bent at the elbow like ours (see the fragmentary statue in the Museo Nuovo of the Palazzo dei Conservatori and two gems).⁵⁹ Our Venus, however, holds her himation in this hand and it falls more simply and diagonally across her body, her gesture suggesting the Venus Genetrix. An Aphrodite in Florence holds her mantle above and behind her right shoulder in much the same fashion, but she is stepping out of it and is almost nude.⁶⁰ Another type which is known from two copies brings the fold in front of her right arm while the left arm crosses her body diagonally to hold the himation near the right hip.⁶¹ Here furthermore the dolphin appears very much in the position of the sarcophagus in Zurich. Still another arrangement appears on a Venus in the Park of Versailles where the end of the himation is brought across the back from the left hip to be held by the upraised right arm.⁶² None of these exactly repeats our Venus and yet the half-draped goddess was extremely popular. They show the infinite variety of pose and drapery that was possible. Venus alone in the center of a sarcophagus is also a rarity, although as we have seen, she often appears coupled with Mars. The large Asiatic sarcophagus of the late second century in Melfi, however, shows Venus thus isolated.⁶³ She is in a different pose, however, her hair is in a large knot and she wears a stephane and chiton as well as himation, her left knee is bent and she holds a shield almost in the position of the Nike of Brescia, while an Eros below reaches up towards it.

Stylistically also I have been able to find no close

⁵⁸ Bieber, *Hellenistic Sculpture*, pl. 396.

⁵⁹ Furtwängler *op.cit.* 319, fig. 136, Mustilli, *op.cit.* 89, pl. 52, no. 212-11. Of the two gems one is in Berlin, Kat. 314, A. Furtwängler, *Die antiken Gemmen* (Leipzig 1900) pl. 13, no. 9, the other in Florence, Museo archeologico, no. 14-444, P. Montuoro, *BullComm* 53 (1925) 125, fig. 4. See Mustilli 89 for a list of four other replicas of the type. An eighth example which puts the weight on the other leg but is somewhat closer to ours in the arrangement of the himation over the left arm, was in the Gréau Collection, Reinach, *Rep. Stat.* 4, p. 200, no. 1.

⁶⁰ L. A. Milani, *Il r. Museo archeologico di Firenze* (Florence 1912) 1, p. 315, no. 53, vol. 2, pl. 154, Reinach *Rep. Stat.* 5, p. 153, no. 6 (arms restored). This is the same type as the Venus of Dresden, *ibid.* 1, p. 336, no. 1, which, however, is nude but has the dolphin at her left.

⁶¹ Cook Collection, Richmond, E. Strong, *JHS* 28 (1908) 11,

comparison for the sarcophagus in Zurich. As with the examples in S. Lorenzo and the Villa Savoia, little use is made of the circular drill except for the flowers of the garlands on the cover. The little bodies are solid and carefully rendered with more attention to anatomical details than one might expect. The faces are rather square with large bulbous foreheads, small pointed chins and mouths with a tendency to droop at the corners. Noteworthy is the emphasis on the eye socket with the incised line well below the eye itself. The wings are larger than those on the S. Lorenzo sarcophagus but are rendered in a more summary fashion, as a rule only two or three long feathers showing in the lower section. Like the Villa Savoia sarcophagus this also may be dated not too late in the third century, probably before 275 A.D.

The next two architectural sarcophagi place the three Graces in the central aedicula. Both have been known for many years. One comes from Ste. Marie-du-Zit and is in the Musée Alaoui in Tunis (pl. 75, fig. 13), the other is near Tivoli in the Casale di Marco Simone, formerly the Villa Cesia (pl. 75, fig. 14).⁶⁴ They are closely allied although the African example is of markedly better workmanship and its architecture has more ornamental detail. Unlike our other examples the central gable is separate from the adjacent arches and seems to rest illogically on the large acanthus leaves placed above the capitals. These also are different from others in our series as they show spiky, saw-tooth edged leaves, instead of the smooth, spoon-shaped ones of the western tradition, with small tendrils above. On the other hand they are not the Corinthian capital with its double volute-like tendrils, characteristic of the Asiatic columnar sarcophagi, although a similar coloristic treatment of foliage appears in the

pls. 7, 8. Mrs. Strong derived the type ultimately from the Venus of Cnidos. Reinach *Rep. Stat.* 4, p. 202, no. 5. Rome, Pal. Viscardi (Pal. del Commercio), *ibid.* 1, p. 325, no. 6, Matz and von Duhn 1, no. 740. Both arms are modern.

⁶² Reinach, *op.cit.* 1, p. 324, no. 3. Compare also the portrait in Ostia of Sabina as Venus, Richter, *op.cit.* fig. 39.

⁶³ Morey ill. 40. Compare also Megiste, ill. 72.

⁶⁴ Ste. Marie-du-Zit: Lawrence *Col.* no. 32, *Musées de l'Algérie et de la Tunisie*, 15, *Musée Alaoui*, Tunis, Suppl. (1910) 66, no. 1115, pl. 46, no. 1; Morey, 52-53, 88, ill. 95; E. Schmidt, *Festschrift Paul Arndt* (Munich 1925) 102f, fig. 11; Wilpert, 3, pl. 290, nos. 4, 5; Hanfmann, no. 504. Measurements: 2.30 m. long, 0.82 high, right end fragmentary 0.12 deep. Casale di Marco Simone: Lawrence *Col.* no. 33; C. Bunsen, *Bdl* (1833) 100; Wilpert 1, p. 68f, pl. 48, no. 1; Hanfmann no. 505. Measurements: 2.26 m. long, 0.68 high, 0.62 deep.

spandrels and above the gables.⁶⁵ The sarcophagus from Ste. Marie-du-Zit also has spirally fluted columns, replaced at the ends by pilasters up which runs an incised rinceau. The example in Italy has plain columns and pilasters, omits the masks from the second and fifth spandrels, and the carved ornament is even more coloristic and indefinite, foliation appearing also on the inner molding of the central gable. In both, the arches have a higher curve than the very low segmental ones of our earlier examples. Both sarcophagi have lost their covers but have low reliefs on the ends, a pine tree on the right end at Ste. Marie-du-Zit (the left is not carved), griffins at the Casale di Marco Simone.

The four Seasons are without wings and repeat the sequence Spring, Summer, Autumn, Winter, which we have already found on three of our sarcophagi. Spring stands at the left with a large basket of flowers in his left hand, on both examples. A small animal (hare?) is in his left hand on the sarcophagus from Ste. Marie-du-Zit. On the other, which is much more mutilated, rough marble around a hole shows that there was something here also at his right foot. The next figure in both cases has lost the attribute he held in his right hand. At Ste. Marie-du-Zit it seems to be the handle of a sickle and he carried a sheaf of wheat in the left, on the other sarcophagus the sickle is in his left hand. Both of these Seasons are completely nude. Autumn, however, is attired in a chlamys which, fastened on the right shoulder and falling across his body like a sling, provides a pouch for the fruit which he holds with his left hand. The right arm is broken away on the example in Italy showing the end of the chlamys falling behind the shoulder as far as the knee. This is shorter and less visible on the African example, although the fold of cloth hanging from the left hand there helps us to identify the similar mass which is fragmentary on the

other. On the former also Autumn's right hand is intact and holds some grape leaves. Winter clad in a long-sleeved chiton with high boots and leggings carries a boar across his shoulders in the position made familiar by representations of the Good Shepherd.⁶⁶ The direction of the animal differs on the two sarcophagi, on the Italian one also a reversed pedum is at Winter's right side and he holds a large bird in his left hand. On the African example this hand is broken but traces of some object held by it appear against the pilaster. Thus one sarcophagus helps with the identification of details on the other although they are never identical. The poses of the four figures also vary. Spring and Summer glance towards each other, the weight in every case on the outer leg but at Ste. Marie-du-Zit, Autumn and Winter both gaze outwards towards the corner, thus breaking the antithetical symmetry, their weight on the right leg; on the other sarcophagus these Seasons form a pair facing inwards, each with his weight on the inner leg. Two of the heads are lost on this example but those that remain as well as all four on the other are without wreaths or other covering.

In the central aediculae are groups of the three Graces, much damaged on the sarcophagus in the Casale di Marco Simone, in better preservation on the other where one head only and parts of two legs are missing. A tall slender vase stands at the left in both cases.⁶⁷ Two of the Graces, on the African sarcophagus, also hold garlands of flowers. Both of these objects appear on the larger group from Cyrene, today in the Museum of Bengasi, where the Graces themselves are in exactly the same poses except for the head of the central one which on the sarcophagus turns to the right and is thus seen in profile. Two other groups of the Graces were also found at Cyrene and the smaller one like ours

⁶⁵ See the drawings of capitals, M. Lawrence, *AJA* 32 (1928) 430, fig. 11, and Morey 9 for a description of the capitals of Asiatic columnar sarcophagi. Compare the pilasters and foliage with Rome J *ibid.* ill. 90.

⁶⁶ It has been argued that the shepherd holding all of the sheep's legs with one hand instead of using both hands indicates a date in the fourth century since it conforms to Sybel's type 2 of the Good Shepherd. L. von Sybel, *Christliche Antike* (Marsburg 1909) 2, p. 104. This argument, however, does not hold when the youth representing Winter must carry attributes in his other hand as he does on the three examples where that hand is intact. Compare also the Hellenistic Satyr in the Prado in Madrid who carries a goat in the same manner over his shoulders but holds the feet with his left hand, a pedum with his right. R. Ricard, *Marbres antiques du Musée du Prado a*

Madrid (Paris 1923) 47-48, pl. 16. Both hands and the pedum are restored but enough remains to indicate their position. Furthermore our figure is not "the Good Shepherd" since the animal held is not a sheep but in two cases a calf and in another a pig or boar; at least at Ste. Marie-du-Zit the thick neck, smooth hide and feet with two upper digits resemble that animal.

⁶⁷ This is probably a lekythos with unguents for the dead as it seems to have one handle, with two it would be a loutrophoros which held water for the nuptial bath. G. M. A. Richter and M. J. Milne, *Shapes and Names of Athenian Vases* (N.Y. 1935) 14, figs. 95-98, p. 5, figs. 40-42. In Greece the latter type was placed on the tombs of unmarried persons. Similar vases often appear beside the Graces in the statue groups. G. Becatti *BullComm* 65 (1937) 41, fig. 1.

has the central head in profile facing right.⁶⁸ It must have been a popular theme in Africa, but appears elsewhere in great profusion and in a variety of media. Of these the most famous group in the round is the one today in Siena (Museo dell'Opera del Duomo) but which was found in Rome in the fifteenth century and which inspired artists from Raphael and Dürer on. A comprehensive study of this iconography was made by Deonna in 1930, a second by Beccatti in 1937 who seems not to have known the former's work. Deonna's list, however, is much the most inclusive and he gives in all over 100 ancient examples with eleven statue groups or their fragments, and seventeen sarcophagi to which Rodenwaldt in 1938 added eight more.⁶⁹ It is also a popular subject on both gems and coins. Obviously there must have been an extremely famous original of the three nude Graces in their round dance. We still do not know, like Pausanias, whether it was painting or sculpture.⁷⁰ Of the sarcophagi, all with the exception of that from Ste. Marie-du-Zit, are from Rome or its vicinity, in every case where their origin can be traced, although four have wandered to England and one to Paris. Our two are the only examples of columnar sarcophagi, four are of frieze type, many are strigil sarcophagi and even more are fragments too small to identify as to type. The theme never appears on the many Greek or Asiatic sarcophagi, rich as they are in mythological subjects. What is the meaning of these figures and particularly why do they appear in this featured position on the sarcophagi? Here again, I believe we have a symbol for conjugal felicity. As Rodenwaldt has pointed out,⁷¹ there is no evidence for a cult of the Gratiae in Rome as there is in Greece but they do represent the blessing of the fertility of the soil, hence the gifts often

⁶⁸ *ibid.* figs. 1-3. For Renaissance and later versions of the group see also A. von Salis, *Antike und Renaissance* (Zurich 1947) 153f, pls. 44-48.

⁶⁹ W. Deonna, *RA* series 5, 31 (1930) 274-332, Beccatti *op.cit.* 41-60, G. Rodenwaldt *JRS* 28 (1938) 60-64. I can add little to these lists. Of the sarcophagi, Deonna's no. 7, Rome, Palazzo Castellani, is now in the Villa G. Tittoni near Manziana, C. G. Giglioli, *BullComm* 69 (1941) 9, figs. 2-4.

⁷⁰ Pausanias 9.35.6-7. See Beccatti *op.cit.* pp. 55f for a discussion of the relation of the Venus of Cyrene to this group and whether the original was a painting or sculpture. Beccatti follows Furtwängler and Schmidt *op.cit.* in believing in the first hypothesis, Curtius and Reinach held the opposite opinion, Deonna *op.cit.* 298f. In the most recent discussion of the problem, M. Bieber *op.cit.* 149, summarizes the arguments, stresses the plastic manner of the conception and its lack of background when it appears in Pompeian painting. She suggests that the

held in their hands, and they are connected with marriage, especially that of Cupid and Psyche as described by Apuleius, where furthermore they are accompanied by the Horae who are, as Hanfmann has shown, forerunners of our Seasons. "Vulcan prepared supper, the Hours decked up the house with roses and other sweet flowers, the Graces threw around balm, the Muses sang with sweet harmony."⁷² Or they appear in a wedding of mortals as described by Claudian "Hymen choose thou the festal torches and ye Graces gather flowers for the feast."⁷³ Again, as with the Seasons we have the connotation if not of Paradise at least of a pleasant world of health and beauty.

When we look at the style of our two sarcophagi the comparison is not as close as we might wish. The one from Ste. Marie-du-Zit is clearly the better as well as the more elaborate of the two. Figures are slenderer and better proportioned, heads are smaller and there is less use of the round drill. It is impossible, however, to judge of the faces as all the noses are smashed, the lips missing and only one eye is visible, that of the Grace at the right. The hair has been rendered with a variety of locks, straight and curly, and the two Graces whose heads are preserved have coiffures with large knots which come almost to the top of the cranium, a fashion more indicative of the third century than of the fourth.⁷⁴ The careful attention to anatomy also of both the male and female figures may be compared with that of the sarcophagus in Zurich. Here also the Seasons are about the same age. On the sarcophagus of the Casale di Marco Simone they are somewhat younger; at least they are shorter with larger heads. We are handicapped here even more by the extremely poor condition of the marble. Only one head, that of Winter, has survived with any of the

sarcophagus from Aguzzano now in the Terme (no. 113226, Aurigemma *op.cit.* 12, no. 2, Wilpert 3, pl. 270 no. 5), which shows the group standing high up on the top of a column may indicate the original erection.

⁷¹ *op.cit.* 6af. The ancient Greek cult, however, seems to have lingered on in Cyrene where one hill is known as the hill of the Graces, Deonna *op.cit.* 295.

⁷² *The Golden Ass* 6.24. See the frieze sarcophagus in the Palazzo Mattei in Rome, R. Venuti, *Monumenta Mathaeiana* 3 (Rome 1778) pl. 15, Reinach *Rep. rel.* 3, pl. 295, no. 1, for the juxtaposition of a rendering of the full story of Cupid and Psyche with the three Graces.

⁷³ *Epithal. of Honorius and Maria* 10.203-204.

⁷⁴ A large knot at the back of the head appears on the medallions of Crispina (m. A.D. 183) and of Julia Donna (m. A.D. 217) J. Toynbee, *Roman Medallions, Numismatic Studies*, no. 5 (N.Y. 1944) pls. 43, no. 4, 44, no. 2.

features intact. This, however, is not unlike the heads on the sarcophagus in the Villa Savoia and it is with this that the rendering of the tunic should be compared. The proportions and treatment of anatomy are also not dissimilar. In view of these comparisons and the many early features on these sarcophagi, a date still within the third century seems to be indicated, the Italian example following the African one by some years.

Three other Season sarcophagi in the Musée Alaoui in Tunis show that the one from Ste. Marie-du-Zit is not a maverick that has somehow wandered there. Two of these, unlike our previous examples, are not of the five-arch type but are decorated with a continuous lintel supported at either end by pilasters. They thus present the same design as a small group of Greek sarcophagi of which the one from Megiste, now in Athens, and the Amazon sarcophagus in Vienna are perhaps the most famous examples.⁷⁶ It later becomes the most popular form for the Christian sarcophagi of Ravenna. The earlier of these was found a few years ago by General Duval in his excavations at Carthage and is in almost perfect preservation (pl. 76, figs. 15-17). It was made for a child, the little girl who appears on the front, but is larger than the sarcophagus in S. Lorenzo.⁷⁷ Like the sarcophagus in Zurich it retains its cover, a high one decorated with thick garlands and streamers, four baskets (calathoi) hanging from rings and which hold seasonal fruits or flowers, and a central tabella which is empty. Curiously it is of a different and grayer marble with a marked horizontal grain.⁷⁸ At the ends are fluted pilasters with capitals whose tight profile, coloristic leaves and central boss or rosette afford a comparison with the sarcophagus from Ste. Marie-du-Zit. Also similar are the high narrow bases of these terminal pilasters. The Seasons likewise follow the same se-

quence and repeat the same formulae. They are a little younger but their pose and glance are identical except that Winter here looks inward as he should, and as he does on the sarcophagus of the Casale di Marco Simone. Attributes also are varied slightly, Spring holds a garland of flowers in his right hand, a much broader basket in his left. Summer has the same sickle and sheaf of wheat and Winter a goose or duck in his left hand, which may have been present on the other example but is today broken away. Unlike that, however, the first two Seasons wear chlamydes and wreaths, Winter a small circular cap.⁷⁹ The animal held by the latter, and this is true of our next example as well, has long ears which stand up and is, I believe, a calf. An overturned basket spilling its fruit also appears on the ground between him and Autumn. The artist, as if aware of the absence of columns between the figures, has filled the empty space with tree trunks on the left and grape vines on the right whose branches arch overhead, but for the grapes of Autumn has substituted a row of leaves above Winter. In the center, replacing the three Graces, is the standing figure of a young girl, set off by a large and wide parapetasma which hangs from two rings in deeply cut folds.⁸⁰ At her feet on the left is a circular box or bundle of scrolls, on the right a square object which looks like a box with a key-hole. From this M. Picard calls her "l'enfant docteur." Like the three Graces and the Venus of the Zurich sarcophagus the central figure is of smaller scale, here of delicate slender proportions. She is completely wrapped in a himation which, fastened on the left shoulder, falls over that arm to her wrist and is drawn tightly across her bent elbow, almost as if it were a sling. This is a common arrangement made famous by the Sophocles of the Lateran but used by women as well as men.⁸¹ The right hand

⁷⁶ M. Lawrence, *The Sarcophagi of Ravenna*, Monographs on Archaeology and Fine Arts, College Art Assoc. 2 (1945) 2, note 12. Rodenwaldt *JHS* 53 (1933) 202f proposed Lycia Pamphylia as a possible place of manufacture for this type. For Megiste see Morey ills. 72-74.

⁷⁷ 1.75 m. long, 0.59 high, 0.47 deep. G. C. Picard, *FA* 4 (1949) 337, no. 3438, fig. 58. M.T. and C. Picard *RA* series 6, 40 (1952) 39, fig. 8.

⁷⁸ It obviously belongs since the burial was undisturbed and a skeleton was found inside. The same combination of marbles occurs on a small child's sarcophagus also found at Carthage and now in the museum there, showing six cupids, one of whom wears a huge mask, *Musées de l'Algérie* etc., 19 (1915) 6, pl. 2, no. 1.

⁷⁹ A similar small cap appears on the well-known relief in Munich of the peasant driving a cow. Bieber *op.cit.* fig. 659.

⁸⁰ This is western iconography. On the columnar sarcophagi it appears frequently behind the deceased. Lawrence *Col.* nos. 2, 8, 10-12, 14, 15, 38, as well as on four examples discussed in this article. Its sole occurrence in the eastern series is on a sarcophagus of lintel type, *Torre Nova A*, Morey ill. 75. For a discussion of its significance and further examples of its use, see W. Lameere, *BCH* 63 (1939) 43-85.

⁸¹ Morey ills. 134, 135. It is an extremely popular pose. Five statues of women in the Musée Alaoui in Tunis hold their mantles in this manner, *Musée Alaoui* 7 (1897) 52, pl. 14, no. 39; vol. 15 (1910) pls. 28, no. 1, 30, no. 1, 32, no. 3. There are more than a dozen examples of both men and women in the Terme Museum alone, B. M. F. Mai *Museo Nazionale romano, I Ritratti* (Rome 1953) figs. 42, 55. See also Richter *op.cit.* figs. 24-31.

holds her mantle, the left a small scroll. She also wears a tiara with a square ornament over her forehead, her hair falling behind her ears in long locks halfway down her neck. The coiffure of Ota-cilia (c.244-49) which we see in profile on her medallion would look much like this from the front.⁸¹

Stylistically the sarcophagus found at Carthage is an excellent example of craftsmanship. There is little use of the round drill except for capitals and foliage and occasionally in the locks of hair. The drapery is deeply undercut and falls in large corded folds, suggesting heavy woolen cloth. The anatomy of the Seasons, granted their younger age, is rendered much as on the sarcophagus from Ste. Marie-du-Zit, except that the sculptor is more skillful and the marble here retains its original polish, but traces of this same high polish are visible on the other sarcophagus. Marked similarity between the two examples leads to the conclusion that they must be the work of the same atelier although not by the same sculptor. How then can we reconcile the earlier dating which places the one from Carthage in the early second century (G. C. Picard) or late Antonine (Ch. Picard) and Ste. Marie-du-Zit as c.300 (Hanfmann)? Obviously the truth must lie somewhere between these two extremes. From the evidence of the coiffure, a date of c. A.D. 250 seems to be indicated for the Carthage sarcophagus and this is where it belongs in the sequence of Season sarcophagi which only start in the first half of the century.⁸²

Of the same architectural type as our last example is the sarcophagus from Teboursouk also in the Musée Alaoui in Tunis.⁸³ It is in much poorer condition as it was built into a wall and has suffered still further damage after it was found, as a comparison of pl. 75, figs. 18 and 19, will show. The chief loss, however, is the small Eros between the central pair, whose torso and wings alone survive.

⁸¹ Toynbee *op.cit.* pl. 45, no. 6. For a marble portrait see F. Poulsen, *Greek and Roman Portraits in English Country Houses* (Oxford 1923) fig. 108, p. 109, note 2 for other portraits. This coiffure appears on medallions from Julia Mamaea (m. A.D. 235) where the braids are somewhat shorter, Toynbee *op.cit.* pl. 44, no. 6, to Salonina (253) *ibid.* pl. 46, no. 7.

⁸² An examination of the sarcophagi of the second century, J. Toynbee, *The Hadrianic School* (Cambridge 1934) pls. 37-48, and K. Lehmann-Hartleben and E. C. Olsen, *Dionysiac Sarcophagi in Baltimore* (Baltimore 1942) plates, of the end of the second century and first decade of the third, shows a totally different treatment in every respect, composition, anatomy, movement and drapery. M. Picard's dating seems to rest solely on the tenuous argument of the high porcelain-like polish of

The faces also are badly abraded, the eyes only remaining visible.

Here the architectural detail is simpler than on the other African sarcophagi. The pilasters are plain except for an incised line which runs around both vertically and horizontally like a frame. A similar incised line appears on the sarcophagus from Ste. Marie-du-Zit and it is possible of course that a rinceau was painted within this frame. The bases are high and narrow, consisting of two flat moldings. The capitals consist of two parts, the lower section flaring out slightly, the upper a heavy rectangular block. Both are now without ornament of any kind. Most curious of all however is the void between these and the lintel above, so that the latter seems to float in the air rather than to rest as it should logically on the structure below. Is this because the detail is unfinished and that, carved capitals being intended, a large upper block of marble has been left from which to cut the projecting leaves and since the abacus block is recessed with no more projection than the shaft of the pilaster below, it has been cut back (compare pl. 76, fig. 15)? This theory would account also for the clumsiness of the bases and the lack of ornament on the pilasters.

The Seasons on the Teboursouk sarcophagus are in a different sequence from any of our other examples. Winter, clothed, in a sleeved tunic and with boots stands at the extreme left holding a calf on his shoulders with his left hand; he held a duck or goose in his right. He glances towards Autumn next to him, who holds grapes in the sinus of his chlamys which is draped over his left shoulder and falls in a long fold from that hand. His right arm is broken but an oval mass of marble below on the background shows that he held some object, probably a bunch of grapes as in our last example. Spring again wears a chlamys, draped in an oval cascade around his neck and falling over his left forearm which holds a large basket. His other attribute is

the marble but Poulsen, *op.cit.* 109, mentions the "porcelain skin" of the portrait of Ota-cilia cited above. Hanfmann speaks of the "gleamingly high polish" of the Season sarcophagus in Kassel, p. 31, figs. 20, 28, which he dates 200-220. I am sure many more instances might be cited. Traces of the original polish appear on the other African sarcophagi. Ste. Marie-du-Zit has many root marks but even so the original polish can be found on portions of the flesh. Even more is visible on the sarcophagus from Teboursouk (pl. 75, fig. 18).

⁸³ Found built into a wall at Hanchor-Roumana, southeast of Teboursouk. E. Espérandieu *BAC* (1891) 478, pl. 34, Wilpert 3, p. 43, pl. 290, no. 6, Hanfmann no. 506. The front only survives, 2.00 m. long, 0.66 high, and a small fragment of the ends.

an animal much like the hare(?) of the Ste. Marie-du-Zit sarcophagus. The terminal figure at the right, Summer, glances in towards his neighbour and holds a large sheaf of wheat, his other arm is broken. He is completely nude. All the Seasons seem to have been bareheaded. They form antithetical groups with their gaze but this is not carried out in the stance as it was on the last example. Here instead the two at the left have the weight on the inner leg, while the right-hand pair repeats the same pose with their left legs at rest.

The central position is occupied by the marriage couple who must have been in the *dextrarum iunctio* although those hands are broken. As before they are of slightly smaller scale than the Seasons. A large parapetasma hangs behind them as it did behind the child on the sarcophagus from Carthage. The woman turns towards her husband so that she is almost in three-quarters view. She wears an extremely long belted chiton over which a voluminous mantle is draped and which covers her head as well, hiding almost all her hair. The man is enveloped in an equally long tunic and toga, but is bareheaded with short curly hair. He was beardless and seems to have held a rotulus. Between them stood a small Eros as we know from the torso and wings which remain. The broken diagonal object against his breast may have been a torch. This is a familiar group on Roman tombs.⁸⁴ We shall find it on three more of our Season sarcophagi (pl. 77, figs. 21-23). The wife's head is usually covered as here but she often holds the edge of her mantle with the left hand. Eros as Hymenaeus also usually, but not always, appears between the pair. A close parallel for the husband's toga with its cross fold in the front like a *contabulatio* occurs on a sarcophagus in Florence which stands today outside the Baptistry but which came from the Palazzo Riccardi, cited above for the tomb portal with Hermes emerging from the door.⁸⁵ Stylistically the Teboursouk sarcophagus is so close to our late example that it cannot be far removed from it in date. It also originally had a high polish which can still be seen on sections of the drapery of the central figures.

Still another sarcophagus from this atelier has survived although only in part (pl. 76, fig. 20). It

also is in the Musée Alaoui.⁸⁶ We have enough of the architectural frame to see that it was like that of Ste. Marie-du-Zit of the five arch type with a central gable. The two surviving capitals are very similar with their crinkly-edged leaves to those on that sarcophagus and, like it, there were spirally fluted columns except for the pilasters at the ends. These last do not have the rinceau but are fluted like the ones on the sarcophagus from Carthage. The spandrel at the left has a half palmette as acroterion for the pediment and above it a flatly rendered dolphin and another sea animal. The terminal one at the right seems to have had foliage. Two Seasons alone remain, Autumn at the left, identifiable from the chlamys which holds fruit although the head and both legs are gone, and Summer(?) in the terminal niche at the right. The latter is completely nude and as both arms are gone and any attributes he held, we can only guess at his identity. He is very close, however, to the figure of Summer on the sarcophagus from Teboursouk. In the niche next to him are a pair of bare feet, so presumably Spring stood here in the same stance as Autumn of the fourth niche of Ste. Marie-du-Zit. Fortunately the central figure has survived except for the head. It is a togatus in much the pose of the Sophocles of the Lateran with the mantle draped tightly around his right bent arm, the left hanging at his side like the young girl on the sarcophagus from Carthage. A similar bundle of scrolls also appears beside his sandaled feet. The anatomical rendering of the torsos of the Seasons and drapery of the central figure relate this fragment with the sarcophagus from Teboursouk. Clearly it was a product of the same workshop.

The next three sarcophagi return to the five arch design of our first examples, inserting a gable in the central niche in which stands the marriage pair. They are all markedly cruder than the African group. Two are in Pisa, the third, of which only a fragment survives, is in Rome. Of the former pair the marble in the Campo Santo (pl. 77, fig. 21) is the earlier.⁸⁷ Like the sarcophagus of Ste. Marie-du-Zit the arches are narrow, moldings are in deep recession and pilasters, decorated with a rinceau replace the spirally fluted columns at both ends of

⁸⁴ Aside from the sarcophagi discussed in this article it appears on the following columnar sarcophagi, Lawrence Col. nos. 1, 2, 3, 12, 13, 34, 37, 47, 49. It is also a popular theme for the center of strigil sarcophagi.

⁸⁵ *ibid.* no. 10, Morey ill. 99. See supra footnote 8.

⁸⁶ Musée Alaoui, Suppl. 2 (1922) 79, no. 1477, Hanfmann

no. 509. It was found in 1913 at Sbeitla. It is in several large fragments and was originally more than 0.75 m. high. Inter-columiations vary from 0.36 at the center to 0.30 and 0.32.

⁸⁷ H. Dötschke, *Antike Bildwerke in Oberitalien* (Leipzig 1874) 1, p. 116, no. 151, Lawrence Col. no. 42, Hanfmann no. 486, fig. 57.

the trough. The high bases and capitals should also be compared. The latter have much the same high tight profile, the bell covered with two leaves with small tendrils or volutes. Round drill holes are punched rather haphazardly, giving a more coloristic effect, although the rinceau which appears on the archivolts and gable as well as on the pilasters is in such low projection as to be scarcely visible in a photograph. In the spandrels are cupids, those of the second and the fifth stand holding a pedum and a basket. The central ones are flying and holding torches, the one at the left lighted, the right extinguished; they remind us of the similar putti with wreaths on the cover of the sarcophagus in Zurich. The Pisan sarcophagus although shorter by 25 or 26 cm. than that of Ste. Marie-du-Zit is somewhat higher and quite deep.⁸⁸ The ends have a flat relief of a panther whose forepaws are raised on a vase.

The four Seasons on the front repeat the usual sequence but curiously two are winged, those at the left, and two are not. There is no apparent rhythm in either stance or gaze. Spring at the left holds a high basket with flowers and a hare, Summer holds sheaves of wheat and a sickle of which only the handle remains. Autumn has the usual bunch of grapes and clasps his chlamys to hold a larger supply of these or other fruits. All three wear chlamydes draped around their necks and falling behind their bodies to the knees. Winter, however, who holds a duck, is completely covered by a himation worn over the head and wrapped tightly around the right arm which is bent and held close to the breast. Except for the covered head this is almost identical with the costume of the little girl on the sarcophagus from Carthage (pl. 76, fig. 15) and as we mentioned then is used for either men or women. Unique on our sarcophagi, except for the third example of this group (pl. 77, fig. 24) and the one from Ferryville (pl. 78, fig. 26), it seems to be a throwback to the figure of Winter on the Roman triumphal arches. On that of Septimius Severus, he wears the same long mantle although differently draped; on the Arch of Trajan at Benevento the arrangement is identical.⁸⁹

⁸⁸ 2.04 m. long, 0.87 high, 0.82 deep. Ste. Marie-du-Zit, 2.30 long, 0.82 high. Compare also Zurich, 2.20 long, 0.85 high, 0.75 deep.

⁸⁹ Hanfmann figs. 22, 124. Winter wearing a mantle also appears on the Arch of Constantine, Wilpert 1, pl. 6, no. 3, but, although he wears it over his head, both the arrangement and style are different.

⁹⁰ Lawrence Col. no. 44, Hanfmann no. 487, fig. 58.

Parapetasma appear behind all the figures and as on the sarcophagus from Teboursouk a marriage pair occupies the central aedicula. The costumes and poses of both husband and wife are also very similar although the latter is less in profile view than on the other sarcophagus. Both heads unfortunately have lost all surface detail. Those of the Seasons have fared scarcely better. One can see a few drill holes in the inner corners of the eye sockets, or for the ends of the mouths. Their hair was somewhat longer than usual and in tight curls punched all over. They were bareheaded. There is thus little for us to judge of the style except the drapery, which looks today rather coarsely grooved but again the surface projection is lost. I believe Hanfmann is correct assigning a date of 280-300 to this sarcophagus.

The second example in Pisa, in S. Pierino (pl. 77, fig. 22) is very close to our last one but the style is even cruder.⁹⁰ The cover at present on it is too small and does not belong. The ends are plain. The architectural detail is very similar except that the spirally fluted columns are slender in sharp contrast to the heavy terminal pilasters. Capitals consist of two smooth, spoon-shaped leaves and the archivolts and gable have lost the rinceau of our last example and the crowning acroterion of the pediment. The spandrel designs also differ. These are tritons at the corners, bearded masks next them and what seem to have been Medusa heads in the central ones.

The Seasons repeat the poses and attributes of the other sarcophagi in Pisa although their gaze differs. All glance towards the center except Winter who looks out to the right beyond the corner. Spring probably held a hare, only the paws remain, although it was in a different position. All the Seasons are wingless and all wear the usual chlamys except for Winter who is clad in a short tunic, his cloak draped as a hood over his head. The parapetasma of our last example have been eliminated. In the center the marriage pair is in the *dextrarum junctio* but here Eros Hymenaeus appears at their feet, and Juno Pronuba is barely visible between their heads.⁹¹ Again all the surface detail has van-

⁹¹ See Cabrol *op.cit.* vol. 8, part 1 (1927) col. 426f. It occurs also on the following columnar sarcophagi: Pisa, Campo Santo, Lawrence Col. no. 37, Morey ill. 103, Tipasa, Lawrence Col. no. 47, Morey ill. 104, and another four-arch one found on the Via Aurelia Antica, now in the Terme, no. 124712, Auri-gemma *op.cit.* 39, no. 97. Eros alone appears on Rome, Villa Savoia, and Concordia, Lawrence Col. nos. 2, 3, Lawrence AJA 32 (1928) 424f, figs. 7, 8.

ished from the heads in this central niche. Of the Seasons, Autumn and Winter are the best preserved. Here the faces are round with heavy cheeks and lips, the eyes drilled in the center of the pupil. The hair is short and suggests a cap; two, Spring and Autumn, have round curls punched with the drill, Summer's hair is in straight locks. He and Autumn seem to have worn wreaths. The drapery is grooved in a summary manner. There is thus little to help us to determine the date beyond a comparison with the other sarcophagus and the proportions of the figures which here are very disturbing. The central pair is so much smaller than the Seasons as to seem like children. As we have discovered, a change in proportions for the figures in the central niche is a commonplace on sarcophagi of this type and cannot be used, as was earlier thought, as an indication of late date. Similar shifts in proportion appear on Asiatic sarcophagi where on the one from Seleukeia the Eros of the center is larger than the adult figures adjacent to him, a still different scale of proportions appearing on the ends. On the Sidamara sarcophagus itself three different scales are used.⁹² Both of these examples are prior to the middle of the third century. At S. Pierino however the contrast is so sharp as to be shocking and certainly indicates a less competent artist. Thus, I believe, this sarcophagus follows the other in Pisa and is perhaps a decade or so later.

Closely related to the last two is the sarcophagus of Sta. Cecilia in Rome (pl. 77, fig. 23) which, drawn by Dosio at the end of the 16th century, was thought to have been completely destroyed.⁹³ Part of one niche, however, has survived and is in the small museum of Sta. Cecilia in Trastevere (pl. 77, fig. 24). As will be seen from the drawing this sarcophagus, but for a few variations, was like the two in Pisa, in fact the resemblance is so close that Huelsen labelled it "today in the Campo Santo." It is of the same architectural form but with six spirally fluted columns and different subjects in the spandrels. These seem to have been eagles in the second and the fifth, two cupids each in the central ones, but the drawing is not clear and the inner figures may have been the winds with their trumpets of the Villa Savoia sarcophagus. Dosio's draw-

ing shows the corner spandrels as empty, but the one at the right at least had a triton very much like the terminal spandrels of the example in S. Pierino (pl. 77, fig. 22). He also has neglected to show the parapetasma which appears behind Winter. This occurred, it will be remembered, on the first sarcophagus in Pisa. The capitals, also, as one might expect, are not accurately shown in the drawing. They have the three spoon-shaped leaves and volutes of the Season sarcophagus of the Conservatori (pl. 73, fig. 5) and the example in the Villa Savoia (pl. 74, fig. 7) but are more carelessly cut. They do not correspond, however, with the capitals of either sarcophagus in Pisa. The drawing shows the marriage pair dressed as before, the woman wearing her mantle draped over her head. As at S. Pierino a fragmentary Eros stands at their feet.

The four Seasons are difficult to identify with certainty as the drawing shows that few attributes survived. The two youths at the left are completely nude as on the sarcophagus in Zurich. The first of these holds a wreath of flowers and should be Spring with Summer in the adjoining niche. At the right Autumn wears his chlamys in the customary manner to make a pouch for a mass of grapes but he is also clad in the trousers of Attis which are laced in front. This peculiar costume occurs on Winter of the sarcophagus in Dumbarton Oaks and appears occasionally on other Seasons sarcophagi. Ours is the only example where someone other than Winter is so attired.⁹⁴ According to Hanfmann, the identification of Attis with Winter may be due to a confusion of him with Adonis who was killed by a boar, the animal of Winter, or even with Ganymede who poured rain from the skies as he poured wine for the gods.⁹⁵ The sole remaining Season of the sarcophagus in Sta. Cecilia (pl. 77, fig. 24) shows Winter enveloped in a long mantle, drawn up over his head. He carries a large duck in the left hand. He is almost identical both in pose and drapery with the figure of Winter on the sarcophagus of the Campo Santo, except that his face is turned to the left to gaze towards his neighbour. The features are damaged, the hair falls in many loose curls. From the little evi-

⁹² Morey ills. 62, 65-67.

⁹³ Florence, R. Bibl. Marucell., vol. 100 *delle Incisione*, fol. 155 r., P. N. Ferri, *BdA* 5 (1911) 305, pl. 18, C. Huelsen, *Ausonia*, 8 (1912) 31, Lawrence Col. no. 43, Hanfmann no. 489. The fragment is 0.64 m. high, 0.40 wide, thus indicating a sarcophagus which if complete would be c.2.20 m. long,

c.0.80 high, about the size of the one in Zurich.

⁹⁴ Hanfmann fig. 2. Other examples are *ibid.* figs. 31, 59, 70 and A 13, A 57, A 97. Hanfmann calls our figure Spring (p. 240), why I cannot discover since he holds the grapes of Autumn. We cannot be certain of course as this section is lost.

⁹⁵ See discussion *ibid.* 240-241.

dence available this sarcophagus seems to have been contemporary with the earlier one in Pisa.

These last examples bring us down to the end of the third century, the one in S. Pierino perhaps into the early years of the fourth. Even later are our next sarcophagi. They take great liberties with the architectural frame and do not tie in closely with the earlier examples. The first of these is another fragmentary sarcophagus in North Africa (pl. 78, fig. 25). It was found at Tipasa in 1892 and stands today in the Parc Trémaux.⁹⁶ It is in poor condition. The front was divided into five intercolumniations but these are of unequal width, the second and the fourth being more than twice that of the terminal and central niches. The aedicula at the extreme left is lost; the second one, and this is also true of the corresponding one at the right, has such a depressed arch that the central part forms a flat lintel behind the heads of the Seasons which impinge on it. In the center the fragmentary archivolt which remains shows the spring of a more normal arch, slightly lower than those on the sarcophagus of the Casale di Marco Simone but a little higher than on the Zurich example. At the right end is a gable. This curious arrangement, as far as I know, is unique but reminds one of the many variations one finds at the end of the pagan series and of the seven-arch-and-gable and seven-arch type of Christian columnar sarcophagi.⁹⁷ The columns and the terminal pilaster are unfluted with very high bases with many recessed moldings; the capitals with their three smooth spoon-shaped leaves are not unlike those of our last example. A single undecorated molding appears above them except in the central arch where there are two.

The Seasons conform more to the usual types. Spring at the left held a budding branch upright in his right hand, an empty circular bowl or basket in his left. A tree grows behind him. Summer with a large sheaf of wheat has what looks more like a shepherd's pedum than a sickle hanging from his right hand. Autumn bears the customary bunch of grapes to which a lizard is running up the background wall, but is without other grapes in the

⁹⁶ Lawrence *Col.* no. 50, S. Reinach *BAC* (1893) 129, pl. 13, H. Leclercq in Cabrol *op.cit.* 15, part 1 (1950) col. 577, fig. 10721, Wilpert 3, pl. 290, no. 2, Hanfmann no. 507. It is 2.21 m. long, 0.71 high, 0.68 deep.

⁹⁷ See Lawrence *Col.* 170, 153.

⁹⁸ Leclercq *loc.cit.* col. 578, Wilpert 3, pp. 41-42, pl. 291, no. 2. The Index of Christian Art lists no early example of the Baptism of Cornelius and none in sculpture.

⁹⁹ Christ seated appears occasionally on the sarcophagi, see

folds of his chlamys. Winter holds two water fowl and what seems to be a pruning tool or small rake. He is clad in high boots, short chiton and a short cloak (cucullus) worn as a hood. The other Seasons are nude except for a chlamys fastened on the right shoulder. As we have so frequently seen, they form rhythmical pairs each glancing towards his neighbor, although here three of them are in the same pose. Thus they vary only slightly from the Seasons of our previous examples.

The other figures, however, present puzzles. A seated figure is in the central niche completely wrapped in a himation with his right arm bent and held close to his breast. The head is lost. In the terminal aedicula at the right a beardless man, enveloped in a long mantle, touches a rocky cliff with a small wand while two small figures in short chitons point towards it or touch it. The French scholars interpreted this scene as Moses smiting the rock, Wilpert called it the Baptism of Cornelius and cited in comparison a tiny fragment in the Lateran where only one head in a square cap and some water remain.⁹⁸ The former identification as Moses (or Peter) is probably correct.

As for the central figure, he has been called Christ but since the head is missing this identification is far from certain. A seated Christ appears on a number of Christian sarcophagi but He is invariably teaching the disciples who cluster around Him.⁹⁹ Here the figure is isolated like the deceased. Whether Christ or not, this follows the Philosopher type.

This sarcophagus which is probably Christian certainly dates well in the fourth century. Hanfmann puts it about 350. The round head and cap-like hair of the man at the right, his poorly articulated shoulder, the summary treatment of drapery folds with their coarse grooves, the heavy features and long noses of the Seasons all are indicative of mid-fourth century work.

Another African example is the sarcophagus found at Ferryville (pl. 78, figs. 26-28).¹⁰⁰ Here the architectural frame is a continuous lintel with pilasters at the ends like the sarcophagi from Carthage

that of Junius Bassus, Lateran 174, Milan city-gate, several level entablature examples etc., etc. Lawrence *Col.* figs. 40, 34, 10, 11, 32, 42, 53. Lawrence *ArtB* 10 (1927) 4, fig. 3. It also occurs frequently in Ravenna, Lawrence *Ravenna*, figs. 1-3, 18, 20, 25, 26, 31. Christ, however, is always surrounded by apostles or disciples whom He teaches. To have the Teaching Christ alone is an anomaly.

¹⁰⁰ G. C. Picard *FA* 4 (1949) no. 3441, who says "found some years ago at Bordj el Hatab."

and Teboursouk, but it is treated even more illogically, as the architrave is between and not resting on the capitals. The pilasters are plain, the bases, although with many moldings, high and clumsy, the capitals decorated with spoon-shaped leaves. The Seasons (fig. 27) are squat heavy figures with large round heads, even further from the classical canon of proportions than our last example. Spring wearing a chlamys tied with a bowknot under his chin, holds a basket high in his right hand, a large garland of flowers trailing on the ground in his left. Summer completely nude comes next, holding a large clumsy sickle and the usual sheaf of wheat. On his head a garland with three projecting flowers gives somewhat the appearance of a cap. Autumn again holds a basket, here filled with fruit, at shoulder height, a bunch of huge grapes in the other hand. He wears a scanty bit of drapery diagonally across his body. Winter in contrast is completely enveloped in a long mantle which goes over his head like a circular hood. His right arm hangs down unlike the two earlier examples, the first sarcophagus at Pisa and the fragment in Sta. Cecilia in Rome, where Winter is similarly clad. Whatever he held in his hand has been broken away. Traces of it remain on the background wall. An agricultural tool with two sharp blades is in the left hand. The figures are squat with large round heads, all face squarely out although their poses retain a suggestion of classical grace and in each pair the weight is on the outer leg. The hands are about twice the size of the feet, however, and the faces square with enormous cheeks.

In the center (pl. 78, fig. 28) within a wreath of wheat and huge poppy pods is the following inscription: Ovillia Junia, pia/vixit annis XXXIII/ diebus V/Pelagi. M. Picard has suggested that the latter word may designate the funeral college to which Ovillia belonged, citing parallels in two inscriptions in Rome, and that the wheat and poppies of the wreath would indicate a cult of Ceres.¹⁰¹ Both the epigraphy and the figure style place this in the middle of the fourth century.

The other late Season sarcophagus is very fragmentary. In fact one may say that more has been lost than is preserved, although there is enough to identify it both as an architectural sarcophagus and one which represents the Seasons. It is in north-

eastern Spain at Ampurias, the town which gives us our word Emporium (pl. 78, fig. 29).¹⁰² Here the aediculae have been increased to seven but are approximately the same width although the central one is slightly larger. Arches alternate with gables but reverse the order of the Christian seven-arch-and-gable type.¹⁰³ Thus there is a pediment in the center. Nearly all architectural detail is lost, columns, moldings and capitals, except for one at the extreme right, which is low with a wide flare and is covered with an indeterminate coloristic foliage. The lower part of the column bases also survive; these are simple square blocks. In the center is an open tomb portal and above it, hanging from the gable and impinging on the upper section of the door is a large, oval conch shell which radiates downward from the top in western fashion. This latter is a most curious feature, without explanation except as a reminiscence of the shell so placed under the gable on Asiatic sarcophagi.¹⁰⁴ The door also is strange. It is half open and there is a vertical lattice screen behind it and on the right side. The door itself is undecorated except for recessed moldings which frame three rectangular panels. Within the top and bottom ones of these are long sections of moldings which must indicate handles. The tomb portal thus does not conform to our earlier examples but adds one more instance of the occurrence of the theme in this group of sarcophagi.

The Seasons are also extremely fragmentary. Autumn, for it must be he, with grapes in the fold of his chlamys, stands at the left, next comes an even more injured figure, with what appears to be a sheaf of wheat (Summer?). On the other side of the door is a youth, nude except for the chlamys which is clearly visible behind him, less so over his shoulder. Against this at the right is a broken mass of marble which may have been a bunch of flowers. If so, he is Spring. Finally Winter stands in the terminal niche at the right completely covered in a mantle which is worn over his head like a hood. He thus conforms to the type of Winter we saw on the sarcophagus in the Campo Santo at Pisa and the fragment in Sta. Cecilia and is closest to the rendering on the example at Ferryville and on the Arch of Constantine.¹⁰⁵ Under the gables between each pair of Seasons is a figure in smaller scale but too fragmentary for identification. The one at the

¹⁰¹ *ibid.* 338, *CIL VI*, 10283-84.

¹⁰² Lawrence Col. no. 53, A. García y Bellido, *Esculturas romanas de España y Portugal* (Madrid 1949) 2, pls. 223-225, vol. 1, pp. 272-274 for further bibliography. It is 2.10 m. long,

0.59 high, 0.63 deep. It was found in 1908.

¹⁰³ Lawrence Col. 153, fig. 42.

¹⁰⁴ Compare Morey ills. 43, 55, 59 etc.

¹⁰⁵ Wilpert 1, pl. 6, no. 3.

left appears to be nude, the other on the right wears a large mantle over his shoulder and a long tunic which falls in many folds almost to his ankles, a costume more mediaeval than classic. All detail of the features is gone, but the heads appear to have been round as on our last example and the proportions those of the fourth century. The evidence which remains, such as it is, points to a pagan rather than a Christian origin for this sarcophagus.¹⁰⁶

Finally a few small fragments show that the Season sarcophagi of architectural form were even more popular than our surviving examples indicate. One of these, a very fragmentary sarcophagus in the Museum at Tunis, has already been discussed. Another has wandered far and is today in the Archaeological Museum in Zagreb (pl. 79, fig. 30).¹⁰⁷ It has had an interesting history. With other material excavated in 1817 at Minturno it was taken first to Venice, then to the Castle of Tersatto where it was described in 1839. At the end of the century the collection went to the Museo Nazionale Croato. Pieces purchased in Naples or Rome had been added along the way and so there is no conclusive proof that our fragment came from Minturno. One niche only survives, the second from the left, and a bit of the gable of the central aedicula. Spirally fluted columns, recessed moldings and their steeper pitch, and the capital covered with coloristic foliage relate this fragment with the two sarcophagi in Pisa, and it is with the figure of Spring on the one in the Campo Santo that the sole remaining Season at Zagreb should be compared. He is in the same pose except for his head which is bent to the right and he must have looked towards the center. Traces of a curtain, the parapetasma, appear under the gable. This presumably would indicate either that the marriage pair or a single figure of the de-

ceased was in the center. Spring wears the usual chlamys and carries a basket in his left hand. The right arm is broken. The ornament in the spandrel, which is very much damaged, may have been a triton. From the proportions and anatomical treatment of the figure this fragment is probably contemporary with the earlier one in Pisa.

Two small fragments in the Vatican should also be mentioned. The first of these (pl. 79, fig. 31) shows a single figure of Autumn.¹⁰⁸ A slender strip of a pilaster, a capital at the left and a horizontal molding above, have led to the identification of this fragment as part of a sarcophagus. If this is true, it must have been of the lintel type like the ones from Carthage and Teboursouk. Unlike them, however, but like the Greek sarcophagi, this lintel is decorated with an egg and dart molding.¹⁰⁹ Autumn stands completely nude, glancing out towards the left, his weight on his right foot. He holds a basket of fruit in his right hand, a hare in the other, while at his feet appear another basket and a panther who looks up. The same animal occurs beside Autumn on the Season sarcophagus in the Conservatori (pl. 73, fig. 5) and it is with the figure there that this fragment should be compared. The proportions are not as svelte, however, the anatomy is less carefully rendered and the hair, although in long loose curls and with a high forelock, has larger and coarser drill holes.

The second piece is also in the Chiaramonti (pl. 79, fig. 32).¹¹⁰ Here there are two fragmentary nude figures whose identification as Seasons rests on the extremely tenuous evidence of part of a sickle on the column between them. Both heads are gone as well as the capital of the spirally fluted column. They are completely nude like the Spring and Summer of the sarcophagus in Zurich who are in the same poses and of much the same proportions.¹¹¹

or stalks of a grapevine appear at both ends of the trough and what seems to be another branch extends above behind the heads of the figures, looking a little like a series of arches. Hanfmann describes it as an arbor with arcades but I can see no architectural elements and tendrils sprout upward from it all along the line. The second is a relief in the Hermitage in Leningrad (Hanfmann no. 511, J. Strzygowski *Römer* 12 [1898] 5, fig. 2). It comes from Egypt and is of limestone, not marble, but although Strzygowski thought it part of a sarcophagus, such a hypothesis seems to me highly unlikely. In any case it is late Coptic work, not earlier than the fifth century, and shows two clothed men wearing *haloes* and standing under arches. One holds a basket, the other a large brace of birds, attributes which led to the identification of the latter as Winter, the former as Spring or Autumn. They are completely unlike any rendering of the Seasons on Roman sarcophagi. D. Levi (*ArtB* 23 [1941] 273, fig. 13) identifies them as January and

¹⁰⁶ Garcia *op.cit.* 1 p. 274.

¹⁰⁷ Lawrence *Col.* no. 52, L. Crema *BSiM* 4 (1933) 41, pl. 15, fig. 38, Hanfmann no. 488. It is 0.38 m. high, 0.26 long.

¹⁰⁸ Amelung *op.cit.* 1, pl. 47, no. 215, Hanfmann no. A 39, fig. 63. It is 0.66 m. high, 0.31 long.

¹⁰⁹ See the discussion, *supra* note 75, for this type. For the egg-and-dart molding see G. Rodenwaldt *JHS* 53 (1933) 181ff, pl. 11, figs. 2, 14 and Robert *op.cit.* 3, part 3, pl. 139, no. 434. J. D. Young *ArtB* 13 (1931) 142, figs. 2-5.

¹¹⁰ Lawrence *Col.* no. 58, Amelung *op.cit.* 1, pl. 51, no. 270. The latter so identified them and says "good careful work." 0.53 m. high, 0.71 long.

¹¹¹ I have omitted three fragments which are on Hanfmann's list. The first is the front of a sarcophagus plastered high into the wall in the court of the Vatican Belvedere (Hanfmann no. 479, fig. 38, Amelung *op.cit.* 2, pl. 24, no. 102 v, p. 317) because it is not an architectural sarcophagus. Heavy trunks

Finally there is another example in north Africa, a small fragment which is today in the Musée National in Algiers but which was found in Carthage¹¹² (pl. 79, fig. 33). The aedicula at the right end which is covered by a low gable and the adjacent one alone survive, separated by a clumsy undecorated column. The capital has two tendrils or volutes with a spoon-shaped leaf in the center. In the terminal niche stands Winter, clad in a belted chiton and holding a large lamb over his shoulder with both hands in the fashion of a Good Shepherd. A completely nude youth appears at the left who should probably be identified as Spring from the cornucopia that he holds which seems to have flowers, and the budding branch beside him. His right hand is raised suggesting that he held or pointed to some object which would have been in the center of the sarcophagus, but, whatever this may have been, it is now lost. Both figures are clumsy anatomically and are crudely rendered. Winter especially is rigidly frontal with a circular head, the cranium doming up, the hair striated and suggesting a pompadour. Comparison of the architectural form with the sarcophagus at Tipasa and the figure style point to a date late in the fourth century.

It is obvious that these Season sarcophagi are not the product of any one atelier nor even of one geographic region. The first three, the examples in S. Lorenzo, the Conservatori and the Metropolitan, are connected only by iconography not by style. The next two are quite dissimilar although both have Venus in the central niche. When we come to the African examples, however, we are I believe dealing with one workshop. The survival of four of these sarcophagi in Tunis alone indicates that they must have been produced there. How the companion

February. For the third fragment (Hanfmann no. 503) see the Addendum to this article. Professors F. Matz and Hanfmann have brought to my attention also the fragments of two architectural sarcophagi in Genoa which the former thought represented the Seasons. Both are plastered high into the exterior wall of the Cathedral and have been published by G. Monaco, *Rivista municipale Genova* 16 (1937) pp. 6-9, no. 7, fig. 11, no. 10, figs. 14, 15. The first shows five very segmental arches resting on spirally fluted columns. Standing on pedestals within the niches are five single figures, in the first at the left a female one, I believe, in a belted chiton with overskirt whom Monaco suggests is Artemis. The face has been broken away. In the second, fourth and fifth niches are standing youths, nude except for chlamydes over their shoulders. Beside all of them are high baskets or urns, banked high with fruit or flowers. These are undoubtedly what led to the explanation of these figures as Seasons. In the central aedicula is a dancing

sarcophagus to Ste. Marie-du-Zit wandered to Italy, I cannot explain. The two examples in Pisa and that of Sta. Cecilia in Rome are the products of another workshop. All three clearly belong together. In the fourth century sporadic examples appear, three in North Africa and one in Spain. These draw elements from the earlier models but introduce novelties.

The Seasons are usually represented from the left to the right, beginning with Spring and following the cycle of the year. This occurs on eleven examples although other sequences are possible. Also they are usually paired and each looks towards his neighbour. The more subtle arrangement of glancing out while their bodies sway inwards appears in our group only on the sarcophagus of S. Lorenzo and is very rare, although it is found on a sarcophagus in the Conservatori cited above for its stylistic comparison. Winged Seasons also are comparatively rare. Only three of our group represent all the Seasons thus (S. Lorenzo, Conservatori and Zurich) while one in Pisa shows two of them winged and two not. Winter, as we have seen, is usually clothed in chiton or mantle, although twice he appears like the others nude except for the chlamys (Conservatori and Metropolitan), a feature which seems to point to an early date.

The subject in the center varies. Four times we have found the tomb portal, four times the marriage pair. The deceased also appears three times and in two more instances in mythological guise, as Mars and Venus or Venus alone. Once an inscription is substituted for the figure. Twice the three Graces appear. In every case the subject is one endowed with special significance.

woman (Maenad?). Monaco consequently has called this a Dionysiac scene and identified the nude youths as satyrs. The condition of the sarcophagus and the distance from which one must examine it even when in a window of the building opposite, makes it impossible to reach a definite conclusion. The second one is in two fragments, the larger of four arches, the smaller of two. Under these are the Dioscuri with their horses' heads facing inwards, and four tall, female figures in voluminous drapery. The condition is poor and attributes have been broken away, but one seems to be a faun, another an eagle. Monaco suggests that they are female divinities of Olympos. In any case, I can see no reason to believe them Seasons.

¹¹² *Musées de l'Algérie et de la Tunisie* 20, *Musée de l'Algier*, suppl. (1928) 98, Hanfmann, no. 510. I am indebted to the kindness of Mme. Alquier, Conservateur of the Musée National Stéphane Gsell in Algiers, for the photograph.

ADDENDUM

The sarcophagus front in the Museo cristiano of the Lateran (pl. 79, fig. 34) has been called by Hanfmann "the last Season sarcophagus to be made in Rome," a judgment with which I heartily agree.¹¹³ It is extremely curious, unique in many respects. Not only is it the only example to show all the Seasons clothed but they wear both chitons and chlamydes and all have boots. Summer, furthermore, has a sleeved tunic of quite military appearance, the "Good Shepherd," a short, fur shoulder cape. The latter figure occupies the central niche, again a unique arrangement on the Season sarcophagi although, as we have seen, Winter occasionally holds an animal on his shoulders and thus approximates the Good Shepherd type. He is bearded, which is also strange although not without precedent.¹¹⁴ He holds a straight staff, not the pedum, in his right hand while a small circular bag with fringe on the bottom like a Scotch sporran, appears behind his elbow as if suspended from the upper arm. Just as strange is the flat, emaciated dog which appears at his feet and which is repeated at the feet of the next Season to the right. The hind feet of the first dog are huge and like the paws of a lion, those of the second look like hooves. Both gaze upward, their heads in a position that tests our credulity. In the terminal niche at the left, Autumn holds a long, narrow basket, somewhat like a cornucopia, similar baskets are held by Spring and Summer, while still others, a little wider, appear at the feet of all the Seasons. A curiously shaped jar with a handle occurs also at the feet of Autumn, who holds a large olive(?) branch in his left arm. Spring also has two garlands and Winter a hare. Summer holds a long, straight handle, which, however, looks more like that of a sword than of a sickle. The blade is broken. The architecture also is strange, although parallels can be found for all of the elements except the capitals. The archivolts are extremely narrow. The spandrels show two eagles with outspread wings and, beside the central gable, fragmentary tritons(?). The

terminal ones are empty. Without precedent, however, are the garlands of seasonal fruits or flowers which pass through rings supposedly attached to the keystone of each arch and of the gable.

Many of these details would make one suspicious. An examination of the style confirms one's doubts. The tunics, which are all belted low on the hips, show the back hem hanging a few inches below the front. More disturbing, however, is the fact that one cannot follow the folds with any logic, especially in the bloused sections and in the chlamydes of Summer and Winter which project in curious pouches over the collarbone. On the latter, the right arm which holds the hare is not only poorly articulated but has a projecting bump too high for the biceps and then becomes paper-thin at the elbow. He seems also to have a tight cuff which almost cuts off that hand. The lamb carried by the Good Shepherd has about the thickness of a lady's fur neckpiece. Although surfaces may be flattened and other planes telescoped, this lack of solidity is a mistake that one never finds in classical sculpture or its late derivatives in the early Christian period, whatever other faults they may have. Yet it is perhaps the most striking feature of this sarcophagus. The figures are in very slight projection sinking at places into the background which is itself rough, almost rusticated. The folds of the chitons over the torso project beyond those of the mantles above them. On Autumn also a horizontal groove almost cuts the body in two at this point.¹¹⁵ The basket of Spring sinks into his shoulder, the folds of the garment beyond having the same projection. Both dogs, in fact all of the objects on the ground, are flat as if a heavy roller had gone over them.

Large sections of the faces of the terminal figures have been restored and possibly also that of Spring. The other two seem to be original as is the hairline of all the figures. The latter is treated with a variety of techniques but in every case the hair is pushed back of the ears and grows down the nape of the neck. Summer and Winter particularly have very curious hairlines. The ear of the Good Shep-

and Rome, Villa Savoia).

¹¹³ Lawrence Col. no. 45, R. Garrucci, *Storia della Arte cristiana* (Prato 1879) 5, pl. 302, no. 1, Wilpert 1, pl. 136, no. 2, Hanfmann no. 503, pp. 59-60, speaks of the tunics as archaic and of its "crypto-Christian" character. He tries to date it in the reign of Julian the Apostate (360-363). The measurements are strange: 1.68 m. long, 0.70 high. It is thus shorter than the child's sarcophagus at Carthage (pl. 76, fig. 15) and yet higher or as high as a number of the tombs for adults (cf. Tipasa, Casale di Marco Simone, Teboursouk, Ampurias,

¹¹⁴ The Index of Christian Art lists this with a question whether it is really the Good Shepherd. The bearded type occurs most frequently when two or even more shepherds are represented, see Wilpert 1, pls. 4, no. 3, 117, no. 4, 119, no. 1, 134, no. 1-3 but also pls. 58 and 132, no. 3.

¹¹⁵ Unfortunately this incision is not visible in my photograph. The horizontal cut across the skirts of the two right-hand figures seems to be an injury.

herd is badly misplaced and has descended almost to a level with his mouth. The latter is open as is that of Summer where it is almost round, his nose and forehead puckered as if he were calling aloud. Open mouths are a feature of many of the restored heads in the Lateran collection of sarcophagi. Both these faces with their soft pudginess and blurred

contours create the impression of being modelled in clay rather than carved in stone.

The conclusion, therefore, seems inevitable that we should add this sarcophagus front to Wilpert's list of forgeries and falsifications in early Christian sculpture.²¹⁶

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²¹⁶ J. Wilpert, "Early Christian Sculpture: its Restoration and its modern Manufacture," *AntB* 9 (1926) 89ff. The slight projection of the figures and rough background may indicate that this was an unfinished sarcophagus and that, falling into the

hands of a restorer, its surface was completely recut. Compare Lawrence *Col.* figs. 6, 8, 33 and 45, Wilpert 3, pl. 283. It entered the Lateran in 1854; there is no record of its provenance or previous history.



Greeks, Carians, and the Purification of Delos*

CHARLOTTE R. LONG

TESTIMONIA

1) Thucydides 1.8.1-2:

καὶ οὐχ ἡσσον λησταὶ ἡσαν οἱ νησιῶται, Κâρες τε ὄντες καὶ Φοίνικες· οὗτοι γὰρ δὴ τὰς πλεύστας τῶν νήσων ὥκησαν μαρτύριον δέ· Δῆλον γὰρ καθαιρομένης ὑπὸ Ἀθηναίων ἐν τῷδε τῷ πολέμῳ καὶ τῶν θηκῶν ἀναιρεθεισῶν ὅσαι ἡσαν τῶν τεθνεάτων ἐν τῇ νήσῳ, ὑπὲρ ἡμίσυν Κâρες ἐφάνησαν, γνωσθέντες τῇ τε σκευῇ τῶν σπλανχνῶν ξυντεθαμμένην καὶ τῷ τρόπῳ φῶν ἔτι θάπτουσιν. καταστάντος δὲ τοῦ Μίνω ναυτικοῦ πλωμάτερα ἐγένετο παρ' ἀλλήλους (οἱ γὰρ ἐκ τῶν νήσων κακούργοι ἀνέστησαν νῦν αὐτοῦ, ὅπερ καὶ τὰς πολλὰς αὐτῶν κατέκινε), . . .

2.) Thucydides 3.104.1-2:

Τοῦ δὲ αὐτοῦ χειμῶνος (426/425 B.C.) καὶ Δῆλον ἐκάθηραν Ἀθηναῖοι κατὰ χρησμὸν δῆτινα. ἐκάθηρε μὲν γὰρ καὶ Πεισίστρατος ὁ τύραννος πρότερον αὐτῆν, οὐχ ἄπασαν, ἀλλ' ὅσον ἀπὸ τοῦ ἱεροῦ ἐφεωράτο τῆς νήσου· τότε δὲ πᾶσα ἐκαθάρθη τοιῷδε τρόπῳ. θῆκαι δοσαι ἡσαν τῶν τεθνεάτων ἐν Δῆλῳ, πάσας ἀνέιλον, καὶ τὸ λοιπὸν προεῖπον μήτε ἐναποθνήσκειν ἐν τῇ νήσῳ μήτε ἐντίκτειν, ἀλλ' ἐς τὴν Ῥήνειαν διακομίζεσθαι. ἀπέχει δὲ ἡ Ῥήνεια τῆς Δῆλου οὕτως ὀλίγον ὥστε Πολυκράτης ὁ Σαμίων τύραννος ἰσχύσας τινὰ χρόνον ναυτικοῦ καὶ τῶν ἄλλων νήσων ἄρξας καὶ τὴν Ῥήνειαν ἐλὼν ἀνέθηκε τῷ Ἀπόλλωνι τῷ Δηλίῳ ἀλύσει δῆσας πρὸς τὴν Δῆλον. καὶ τὴν πεντετερίδα τότε πρώτον μετὰ τὴν κάθαρσιν ἐποίησαν οἱ Ἀθηναῖοι τὰ Δῆλια.

3) Scholia on Thucydides 1.8.1:

οὐχ ἡσσον: ἀπτὶ τοῦ λίαν.

Κâρες τε ὄντες καὶ Φοίνικες: Ἰνα μὴ διαβάλῃ τὸ Ἑλληνικόν, εἶπε Κâρας καὶ Φοίνικας.

οὗτοι γὰρ δὴ: τὸ σχῆμα προαναφώνησις.

ὑπὲρ ἡμίσυν: οὐ τῶν Ἑλλήνων ὑπὲρ ἡμίσυν,

*I am greatly indebted to S. Dow and to M. S. F. Hood for reading all or part of this paper and offering many helpful suggestions. Much of the credit for this paper and none of the blame should be ascribed to them. In addition to the usual

ἀλλὰ τῶν Φοινίκων· οἱ γὰρ Ἑλληνες ἔκαιον τὰ σώματα.

Κâρες ἐφάνησαν κτὲ: οἱ Κâρες πρώτοι εὗρον τοὺς ὄμφαλους τῶν ἀσπίδων καὶ τοὺς λόφους. τοῖς οὖν ἀποθνήσκουσι συνέθαπτον ἀσπιδίσκουν μικρὸν καὶ λόφον, σημεῖον τῆς εὐρέσεως· καὶ ἐκ τούτου ἐγνωρίζοντο οἱ Κâρες. οἱ δὲ Φοίνικες ἐκ τοῦ τρόπου τῆς ταφῆς τῶν ἀλλων γὰρ ἐπ' ἀνατολὰς ποιούντων ὄραν τοὺς νεκρούς, οἱ Φοίνικες ἔξεπίτηδες ἐπὶ δύσιν.

The manuscripts of Thucydides have quite uniform texts for these passages, with no significant variations which might throw the meaning into doubt. The statements themselves are simple, direct, and factual. Thucydides, we can be sure, has described the purification of Delos and the appearance of the graves as accurately as he could, either from his own observation or from reports by people present when the graves were opened. His accuracy, moreover, could easily be verified by his contemporaries, for he compares the graves with those of Caria, a region included in the Athenian Empire, with which his Athenian readers must have been familiar. The principal difficulty involved here is relating Thucydides' statements to what we know about Caria and preclassical Delos.

Before presenting the relevant archaeological material from Rheneia, Delos, and Caria in order to determine what the "Carian" graves on Delos were, I must first mention in what ways I believe Thucydides was limited in his knowledge of the remote past and then consider the scholia and previous modern studies of these passages.

Thucydides drew most of his information about the remote past from literary sources and/or legends rather than material remains. However critical he may be of Homer as a historian, he bases his analysis of the Trojan War upon the *Iliad*.¹ We may assume that his interpretation of the material remains of the past was dependent upon the knowledge of the past which he had gained from literature

abbreviations I shall use *Delos* for Ecole française d'Athènes, *Exploration archéologique de Délos* (Paris 1909-).

¹ Thuc. 1.9-11.

ture. Where the material evidence conformed either to current Greek practices or to those sanctioned by earlier Greek authors such as Homer, he would no doubt identify it correctly, but where it differed, he would presumably regard it as non-Greek, the more so if it conformed to the known practices of a non-Greek region, in this instance Caria.

Most of the scholia on the two passages in question are simply glosses. The one exception, the scholion to Thucydides 1.8.1 quoted above, illuminates the limitations of the scholiast's knowledge more than it does the meaning of the passage. The idea that the Greeks practised cremation comes from Homer and is contrary to Greek customs of the fifth century B.C. The types of Carian weapons are inaccurate recollections of Herodotus 1.171, and the statement about the orientation of Phoenician graves could probably also be traced to a literary source. The scholiast obviously knew little about the past beyond what he might glean from earlier writers. The only point to which I shall refer later is his conviction that cremation was the Greek form of burial.

The first modern attempt to explain these passages was made by Paton and Myres in connection with their exploration of Caria.² Postulating that the "Carian" weapons must resemble those either of pre-Mycenaean or of classical Caria, they suggested that Thucydides' "Carian" graves were in fact graves of the seventh and sixth centuries B.C. containing armor of the Carian type. The discovery in 1898 of a deposit on Rheneia containing material from the graves opened in 426/25 B.C. appeared to confirm this suggestion, for the pottery in this deposit belonged to the eighth to fifth centuries.³ In making their suggestion, however, Paton and Myres disregarded their own knowledge of Carian burial customs and failed to explain how the Athenians could have distinguished the "Carian" graves since Greek armor and burial customs had not changed radically between the seventh and fifth centuries B.C.

Studies subsequent to the discovery of the purification deposit, with the exception of Gomme's commentary on Thucydides,⁴ have endeavored pri-

marily to reconcile Thucydides' statements with the deposit on Rheneia. Wilamowitz recognized that the deposit contained nothing but Greek material and postulated that the material from the "Carian" or non-Greek graves was not reburied.⁵ Poulsen sought to find both "Carian" and "Greek" pottery in the deposit and assigned the geometric and orientalizing pottery to the "Carian" graves.⁶ He further identified the "Carian" weapons as the iron sickles found in the Rheneia deposit. To this Plassart retorted that iron sickles similar to those in the deposit were found in two late fifth century tombs on Rheneia, and hence that the sickles were late and could not be used as a criterion for distinguishing "Carian" graves.⁷ Plassart believed that the "Carian" graves were those of his early settlement on Mount Cynthus, although he admitted that the number of these could not equal Thucydides' estimate.⁸ Rhomaios, following Poulsen, revived the sickle theory on the grounds that sickles were found in various early Greek contexts and might therefore be early as well as late.⁹ Most recently R. M. Cook has accepted Poulsen's stand that the Rheneia deposit contains material from both "Carian" and "Greek" graves, but has considered only the geometric graves "Carian" since these could be distinguished from the later graves by a difference in rite (cremation instead of inhumation) and by the presence of genuine arms in contrast to the sickles.¹⁰

Four different dates have been suggested for the "Carian" graves in these studies: Early Cycladic (a date rejected by Paton and Myres but held by Plassart), pre-geometric, geometric, and geometric and orientalizing. The two earlier dates require the assumption that the material from the "Carian" graves was not included in the purification deposit on Rheneia; the two later that it was. The difficulty with all these dates is that they are based solely on the deposit on Rheneia. Plassart alone considered Delos, and the evidence from Caria has never been adequately presented.

Gomme concentrates on the literary evidence in his commentary.¹¹ He gives little credit to the scholion on Thucydides 1.8.1, but he cites an interesting

² *JHS* 16 (1896) 267.

³ *JHS* 22 (1902) 47-48; K. A. Rhomaios, "He Katharsis tes Delou kai to Heurema tou Stavropoulou," *Deltion* 12 (1929) 181-223.

⁴ A. W. Gomme, *A Historical Commentary on Thucydides*, I (Oxford 1945).

⁵ *SBBerl* (1906) 76-77.

⁶ *MonPiot* 16 (1909) 31-32.

⁷ *Delos* 11 (Paris 1928) 49 n. 7.

⁸ *ibid.* 49-50.

⁹ *Deltion* 12 (1929) 212-223.

¹⁰ *BSA* 50 (1955) 267-270.

¹¹ *A Historical Commentary on Thucydides*, I (Oxford 1945) 106-108.

ancient parallel recorded by Plutarch in his life of Solon.¹² In the controversy between Athens and Megara over Salamis, the Athenians claimed that the graves on Salamis were single burials like those of Attica whereas in Megara, according to the local historian Hereas, it was the custom to bury three or four in a tomb.¹³ Evidently single burials were distinguished as Athenian, multiple burials as non-Athenian. Could this criterion have been used on Delos as well?

The archaeological evidence in regard to the purification of Delos comes from three different areas, the purification deposit on Rheneia, Delos itself, and Caria, and will be presented under these separate headings.

I. RHENEIA

In 1898 D. Stavropoulos discovered a mass of sepulchral material enclosed on three sides by a rough wall.¹⁴ Two groups of stone coffins, totalling 29, had been placed side by side in the enclosure; elsewhere there was a layer 16 cm. thick of debris: broken bones, potsherds, parts of 30 terracotta figurines, a tiny gold double axe, a button, and bits of gold leaf, 14 bronze vessels, mostly phialai, and some iron objects, notably 75 sickle blades.¹⁵ When the pottery was reassembled, the following styles were represented:¹⁶

Mycenaean	1
Geometric	511
Cretan	37
Rhodian	49
Orientalizing	744
Black-figured	379
Red-figured	347
Total	2068 (Total post-geometric, 1556)

Except for the single Mycenaean vase, all the pottery may be dated from the eighth to the fifth centuries B.C., and the small finds confirm this dating. From the appearance of the deposit and the date of

its contents, we may deduce that this material was collected and dumped on Rheneia in the course of the purification of Delos in 426/25 B.C. The question is: does it represent all the graves opened at that time or merely the graves believed to be Greek?

Since most of the debate regarding the interpretation of Thucydides 1.8.1 has centered on this deposit, we should pause here to examine the two conflicting hypotheses: first, that the deposit contains material from all the graves opened in 426/25,¹⁷ and second, that it contains material from only the "Greek" graves, the "Carian" ones having been destroyed or their contents dumped elsewhere.¹⁸

According to the first hypothesis, we must divide the pottery from Rheneia into "Carian" and "Greek" groups. Now if we take the geometric pottery to represent the "Carian" graves, in order to have more than half the graves "Carian" as Thucydides says, we must postulate that the "Carian" graves contained only one pot for every three in a "Greek" grave, which seems hardly likely. If, on the other hand, we include the orientalizing with the geometric so that the number of "Carian" pots is greater than that of "Greek," this conflicts with Thucydides' statement that the "Carian" graves were distinguished from the "Greek" by the manner of burial, since Greek burial customs were essentially the same in the orientalizing and classical periods.¹⁹ The distribution of vases in the Rheneia deposit simply does not fit Thucydides' data.

The second hypothesis, that the deposit represents only the "Greek" graves, has one serious weakness: no other deposit has ever been found. Moreover, if another deposit were found, it might contain pottery of the same periods as the purification deposit or, if it contained earlier pottery, it might be ascribed to the purification of Peisistratos. It may also be argued that religious scruples would have prevented the Athenians from destroying any graves, but they are said to have destroyed the graves

¹² Plut. *Solon* 10.4-5.

¹³ Hereas of Megara, Jacoby *FGrHist* 486F4, quoted by Plutarch (*Solon* 10.5).

¹⁴ K. A. Rhomaios, "He Katharsis tes Delou kai to Heurematou Stavropoulou," *Deltion* 12 (1929) 181-223.

¹⁵ *ibid.* 186-190; 210-211.

¹⁶ *ibid.* 208-210.

¹⁷ This view has been held by F. Poulsen, *MonPiot* 16 (1909) 31-32; K. A. Rhomaios, *Deltion* 12 (1929) 181-223; R. M. Cook, *BSA* 50 (1955) 267-270.

¹⁸ This view has been held by Wilamowitz, *SBBerl* (1906)

76-77; A. Plassart, *Delos* 11, 49-50.

¹⁹ The pottery would be different, of course, but I am not at all sure that the Athenians would have paid any attention to pottery. If they had, I think they would have accepted Orientalizing pottery as Greek, for even though, as R. M. Cook remarks (*BSA* 50 [1955] 269), the Persians had largely obliterated the relics of earlier periods in Attica, the Athenians saw Greek dedications of the seventh and sixth centuries on display in the sanctuaries when they visited other towns, Corinth, Delphi, for that matter Delos itself.

of the Alkmaionidai when that family was driven into exile.²⁰

Of all the material in the Rheneia deposit, the Mycenaean vase is the most puzzling. It is an ordinary pyxis, belonging to Late Helladic III A-B, for which there are many parallels, particularly from Mycenaean tombs, although we cannot attach too much importance to the last fact, since much of the extant Mycenaean pottery comes from tombs.²¹ How did this vase find its way into the purification deposit? It clearly did not come from the Mycenaean settlement on Delos, for this is located around the Hieron of Apollo in the area purified by Peistratros. It may have been merely a curiosity which was placed in one of the geometric to classical graves or it may have come from an isolated Mycenaean house or grave which was broken into by a later burial. The third possibility is that it was the only Mycenaean vase preserved in 426/25 B.C. and that it was saved for some particular reason, perhaps because it was found in an individual grave instead of the usual Mycenaean chamber tomb.

2. DELOS

Since the graves opened in 426/25 were all emptied, the archaeological evidence of Delos must necessarily be circumstantial. The only ancient sepulchres ever excavated on the island are two Middle Bronze Age tombs,²² ascribed in classical times to the Hyperborean Maidens and no doubt spared in the purifications by their having been consecrated to hero cults. The island was first settled, however, in the Early Bronze Age,²³ and the pottery found on it attests to its occupation during all three divisions of the Bronze Age, though not necessarily continuously.²⁴ The purification deposit on Rheneia itself is sufficient evidence for the later habitation of Delos.

The tombs of the Hyperborean Maidens are our chief proof for the occupation of Delos in the Middle Bronze Age. They are circular buildings similar in plan and construction to the Early Minoan III

and Middle Minoan I tholoi of Crete. The better preserved has even the rectangular antechamber which some of the Minoan tholoi possess.²⁵ Their connection with Crete is further strengthened by the discovery of a Middle Minoan spouted, hole-mouthed vase in one tomb.²⁶ Bone splinters were found in both tombs, and they were indubitably used as sepulchres either by individual families or by the Middle Bronze Age community on Delos as a whole. These tombs then prove that burials were made on Delos in the Bronze Age and that the inhabitants of the island in the Middle Bronze Age either came from Crete or were subject to strong Cretan influence.

In the Late Bronze Age, a flourishing settlement existed on Delos. In the area later occupied by the Hieron of Apollo were found the remains of private houses together with those of a larger building consisting of a series of chambers around a paved court.²⁷ The sherds found at the level of the foundations belonged almost exclusively to the Late Helladic period. Vallois assigns three additional buildings to the Late Bronze Age because of their massive stone thresholds of Mycenaean type: Edifices H and Γ, and the earliest structure (AC) on the site of the Artemision.²⁸ As the centers of the major cults of the classical period, the Hieron of Apollo and the Artemision would naturally lie above the earlier settlement. It is rather surprising, in fact, that no Mycenaean palace has yet been located beneath the Hieron, since at other Mycenaean sites the temple of the chief Greek deity is built directly above the Mycenaean palace. In addition to these architectural and ceramic remains of the Late Bronze Age, there was lately uncovered within the foundations of the Artemision a deposit of Late Helladic and Geometric objects, which included some excellent Mycenaean ivories.²⁹

Clearly a settlement of this sort required one or more cemeteries nearby. The inhabitants may have made some burials on the neighboring islands, on Mykonos where Stavropoulos discovered two plun-

²⁰ Plut. *Solon* 12, especially 12.3.

²¹ Furumark, Arne, *The Mycenaean Pottery, Analysis and Classification* (Stockholm 1941) 599, Form 19, Type 94.

²² *Delos* 5 (Paris 1910) 63-74; *BCH* 48 (1924) 247-260.

²³ *Delos* 11, 11-50.

²⁴ *Delos* 15 (Paris 1934) 6-10, nos. 1-21.

²⁵ For the Minoan tholoi in general, Xanthoudides, S., translated by J. P. Droop, *The Vaulted Tombs of Mesara* (London 1924). For the antechambers in particular, *ibid.* 5-6, 32-33, 51, 56, 71, 134.

²⁶ *Delos* 5, 69, no. C, fig. 91; *Delos* 15, 7, no. 6.

²⁷ *CRAI* 1908, 180-182; *BCH* 73 (1949) 561. The evidence for the Mycenaean occupation of Delos is summarized by M. P. Nilsson, *The Minoan-Mycenaean Religion* (Lund 1950) 611-613.

²⁸ Vallois, R., *L'Architecture hellénique et hellénistique à Délos jusqu'à l'évasion des Déliens* ("Bibl. des Ecoles franç. d'Athènes et de Rome," fasc. 157; Paris 1944) 1-20, 109; for Edifice H, *BCH* 45 (1921) 208-209, fig. 1.

²⁹ Gallet de Santerre, H., and Treheux, J., "Rapport sur le dépôt géen et géométrique de l'Artémision à Délos," *BCH* 71-72 (1947-1948) 148-254.

dered chamber tombs of the Mycenaean type,^{29a} or on Rheneia where twenty-four protogeometric vases were found by chance, perhaps the contents of a later chamber tomb.³⁰ Since we know from the Tombs of the Hyperborean Maidens that burials were made on Delos in the Middle Bronze Age, and from the Purification Deposit that they were made there also from the Geometric period until they were prohibited at the time of the Peloponnesian War, it is reasonable to suppose that most of the burials of the intermediate Late Bronze Age were made on the island of Delos.

Given the presence of Mycenaean cemeteries on Delos, we can reconstruct the types of tombs and the burial customs probably in use from those of other Mycenaean settlements. The common sepulchre was the rock-cut chamber tomb,³¹ of which examples have been found on adjacent Mykonos. In addition there were built tombs, the tholoi known on the Greek mainland and in Crete and the rectangular type with corbelled vault peculiar to Crete.^{31a} While these tombs differ somewhat in plan and construction, they are basically the same. Each has an entrance dromos, a doorway, and a sepulchral chamber. Each is a family sepulchre, usually containing several persons, each with his funerary equipment: pottery or bronze vessels, jewelry, tools, and weapons, or whatever his descendants left of them when they cleared the tomb for later interments. The bodies were inhumed for the most part, though there is some evidence of cremation toward the end of the Late Bronze Age.^{31b} Between burials the dromos was blocked with

^{29a} *AM* 23 (1898) 362; *BSA* 51 (1956) 12.

³⁰ There is evidence of burial on Rheneia in the protogeometric period (V. R. D'A. Desborough, *Protogeometric Pottery* [Oxford 1952] 128, 156-158). Twenty-four vases were found there by a peasant. I suspect that these are the contents of a single chamber tomb in accordance with my conclusion (stated later in this paper) that the use of chamber tombs continued into the protogeometric period on Delos. The discovery of a single tomb representing at most a dozen burials does not prove that all the tombs belonging to the Mycenaean settlement on Delos were made on Rheneia. Since the burials of the Middle Bronze Age and of the Geometric to Classical periods were made on Delos itself, it is probable that most of the burials of the intermediate period were also made on Delos.

³¹ Wace, A. J. B., *Mycenae, an Archaeological History and Guide* (Princeton 1949) 14-19.

^{31a} Only three Late Minoan tholoi are known: Wace, *Mycenae* 119; Pendlebury, J. D. S., *The Archaeology of Crete* (London 1939) 243; Hutchinson, R. W., "A Tholos Tomb on the Kephala," *BSA* 51 (1956) 74-80. For the rectangular built tombs see Pendlebury, *The Archaeology of Crete* 242-243; 306-308.

^{31b} Lorimer, H. L., *Homer and the Monuments* (London

stones. Mycenaean tombs are generally found in groups at varying distances from the town.

If, as the evidence suggests, Mycenaean tomb existed on Delos, what became of them? It is conceivable that all of them lay within sight of the Hieron of Apollo and hence would have been removed by Peisistratos; but it seems more probable that they were scattered about the island and hence were subject to the later purification. Would the Athenians in 426/25 B.C. have overlooked all the Mycenaean tombs while emptying the less conspicuous later graves?

Taken by itself, the evidence on Delos is much too weak to refute the evidence of the Purification Deposit on Rheneia. The very existence of Mycenaean tombs on Delos may be denied, or it may be argued that any tombs of this period which did exist on Delos were destroyed by Peisistratos or some other agency before 426/25 B.C. Yet the hypothetical Mycenaean tombs on Delos offer a far better contrast to Athenian burial practices of the fifth century B.C. than does any of the material in the Purification Deposit on Rheneia.

3. CARIA

Despite greater archaeological activity in Caria within the last ten years,^{32a} our knowledge of Carian burial customs is still largely dependent upon W. R. Paton's excavation at Assarlik seventy years ago³² and upon the exploration of Caria which he made with J. L. Myres³³ as revised by later surveys.^{33a} There is little evidence for the habitation of the Halicarnassus Peninsula before the Iron Age, so far as can be determined from surface observa-

1950) 104; Blegen, C. W., *Prosymna, the Helladic Settlement preceding the Argive Heraeum* (Cambridge 1937) 143, 242; Pendlebury, *The Archaeology of Crete*, 243; Vermeule, E. T., *AJA* 62 (1958) 118.

^{32a} The following sites have been investigated: Mylasa: Lorimer, *Homer and the Monuments* 24, 30, 31; Akarca, Aşkidel and Akarca, Turhan, Milas, *Cografyası, Tarihi ve Arkeolojisi* (Istanbul 1954) reviewed by Nezih Firatlı, *Gnomon* 28 (1956) 626-28. I regret that I have been unable to obtain the original Turkish publication.

Labranda: *Labranda, Swedish Excavations and Researches* ("Skrifter Utgivna av Svenska Institutet i Athen") of which I, I (Stockholm 1956) has appeared. Perhaps the most interesting finds are the clay tablets with Carian inscriptions published by Gösta Säflund, *Opuscula Atheniensia* 1 (1953) 199-205.

Theangela: *AJA* 60 (1956) 379.

³² *JHS* 8 (1887) 66-82.

³³ *JHS* 16 (1896) 242-267.

^{33a} Guidi, G., and Maiuri, A., "Viaggio di Esplorazione in Caria," *Annuario* 4-5 (1921-1922, Bergamo 1924) 345-488; Bean, G. E., and Cook, J. M., "The Halicarnassus Peninsula," *BSA* 50 (1955) 85-171.

tions, although traces of prehistoric occupation have been found near Mylasa, a jug belonging to the third millennium B.C., and some Mycenaean pottery.^{33b} So far as I know, no prehistoric graves have been found, and the tombs all belong to the Iron Age.

The earliest Carian tombs are those at Assarlik, which may be dated on the basis of their pottery from the beginning of the Protogeometric period into the Geometric.³⁴ Two types of sepulchre were found: cist graves, which were usually grouped together within a rectangular enclosing wall,³⁵ and chamber tumuli.³⁶ For our purpose, the cist grave is useless; it is too similar to the normal Athenian burial of the fifth century B.C. to have served as a criterion for distinguishing Carian from Greek burials. The cist graves at Assarlik did contain cremations, to be sure, but so did the contemporary protogeometric graves of Attica, and we have no evidence that cremation persisted any later in Caria than it did in Attica. The chamber tumulus, on the other hand, differs quite obviously from the Attic grave. It consists of a rectangular sepulchral chamber and entrance dromos covered by a mound of loose stones held in place by a circular retaining wall. The sepulchral chamber is sunk slightly below ground level. Its walls are built up of stones, and it is roofed with a corbelled vault. The entrance dromos itself is evidence that the chamber was intended to hold more than one interment, and the number of ash urns actually found varied from one to three.³⁷

The Carians continued to build and use chamber tumuli through the fifth century B.C. At Gökçeler, Maiuri examined chamber tumuli belonging to the late geometric or early archaic period.³⁸ Others are known in the vicinity of Burgaz (Gheresi), including a particularly fine one cleared by Paton.³⁹ Although it had been stripped of its original contents, its excellent masonry and a sherd of Attic red-

^{33b} Halicarnassus Peninsula: *BSA* 50 (1955) 168; Mylasa: Akarca, *Milas* 76-77, mentioned by Firatlı, *Gnomon* 28 (1956) 627-28.

³⁴ *JHS* 8 (1887) 66-78; 16 (1896) 243-47.

³⁵ *JHS* 8 (1887) 68-69, 73, 77.

³⁶ *JHS* 8 (1887) 67-72; *JHS* 16 (1896) 245-247.

³⁷ *JHS* 8 (1887) 68, 70, 72.

³⁸ *Annuario* 4-5 (1921-22) 427-429; *Clara Rhodos* 1 (1928) 123-24; Bean and Cook, *BSA* 50 (1955) 125, 166.

³⁹ *JHS* 8 (1887) 78-81, figs. 27-29.

^{33b} *BSA* 50 (1955) 113; Mellink, M. J., *AJA* 60 (1955) 379.

^{33b} Bean and Cook, *BSA* 50 (1955) 121, 128-29, 167.

⁴⁰ The cemetery belonging to Troy VI consisted of individual cremation burials in jars. The Hittites inhumed their dead individually in pithoi or earth graves (Gurney, O. R., *The Hittites*

figured ware found in it suggested to Paton that it had been built in the fifth century B.C., perhaps for one of the Carian princes mentioned in the Athenian tribute lists. Another tomb recently looted at Theangela contained quantities of bones, a Panathenaic amphora, a red-figured pelike, and a kalyx-krater.^{39a} The amphora and the pelike have been dated ca. 420 B.C.

In addition to the chamber tumuli, the earliest of the rock-cut chamber tombs may antedate the Peloponnesian War. These seem to be rock-hewn imitations of the built chambers of the tumuli and have vaulted ceilings reminiscent of the corbelled vaults of the chamber tumuli.^{39b} Around three sides of the chamber was left a ledge of rock out of which were hollowed three sarcophagi. Their number corroborates the evidence of the chamber tumuli that each sepulchre was intended for several burials, and their length, approximately two meters, suggests that the bodies were inhumed, not burned as at Assarlik.

The chamber tumuli at Assarlik have no antecedents in Asia Minor, where single burials in pithoi or cist graves seem to have been the rule.⁴⁰ They must have been introduced from abroad, presumably from Greece or southeastern Europe where similar tombs are known from the second millennium B.C.⁴¹ Multiple burials within a tomb are characteristic of the Minoan/Mycenaean culture. While inhumation was usual, cremation becomes common in Greece at the beginning of the Iron Age. The Late Minoan III built tombs of Crete offer the closest parallels for the plan and construction of the Carian tombs,^{41a} but the plan itself is very like that of the rock-cut chamber tombs used both in Crete and in Greece during the Late Bronze Age. Mounds were heaped over the Mycenaean tholoi and perhaps also over the Cretan built tombs.^{41b}

The contents of the tombs at Assarlik also have [Melbourne, London, Baltimore, 1952] 166). The Lydian and Phrygian tumuli are later.

⁴¹ Bittel, K., *Grundzüge der Vor- und Frühgeschichte Kleinasiens*² (Tübingen 1950) 83.

^{41a} N. Valmin, "Tholos Tombs and Tumuli," *Corolla Archaeologica Gustavo Adolfo dedicata* (Lund 1932) 216-27, disregards the difference in plan and derives the chamber tumuli ultimately from Messenian tholoi by way of the Cretan built tombs. J. Wiesner, "Grab und Jenseits," *Religionsgeschichtliche Versuche und Vorarbeiten* 36 (1938) 94, 99, and H. L. Lorimer, *Homer and the Monuments* 107, consider Crete itself the more probable source of the chamber tumuli.

^{41b} Valmin, *Corolla Archaeologica Gustavo Adolfo dedicata* 216-18; Pendlebury, *The Archaeology of Crete* 308.

connections with Greece rather than with Anatolia. The pottery resembles the contemporary wares of Greece. Desborough, in fact, considers two of the vases from the earliest tomb so close to Attic protogeometric pottery that he postulates Athenians settled at Assarlik.⁴² The metal objects include lance-heads and knives with curved blades made of iron,⁴³ and bronze fibulas but no straight pins.⁴⁴ The fibulas have the simple bow with one or two knobs also typical of early Iron Age sites in Greece.⁴⁵ Three tombs of the geometric period contained terracotta larnakes decorated with incised patterns.⁴⁶ Larnakes were commonly used as coffins in Crete during the Late Minoan III period.⁴⁷

On the basis of the archaeological evidence, we may conclude that the settlers at Assarlik came from the Aegean area, most probably from Crete, rather than from Asia Minor. In corroboration of this, we may cite the testimony of Herodotus (1.171): "Of these (i.e. the Carians, the Caunians, and the Lycians) the Carians are those who came to the mainland from the islands." While the discovery of Mycenaean pottery near Mylasa shows that there was contact between Caria and the west during the Late Bronze Age, the occupation of Caria by people coming from the islands must have taken place only shortly before the date of the earliest graves at Assarlik since the settlers brought with them cremation and the use of iron in addition to the Late Minoan type of tomb.

In the fifth century B.C., when Caria belonged to the Athenian Empire and was undoubtedly in close contact with Greece, her material culture must have been thoroughly Hellenic, and the vases and other objects placed in the graves would have been exactly like those of Attica, as the red-figured ware found in the tombs of Burgaz and Theangela indicate. There is some evidence that inhumation was practiced as in Greece in the fifth century B.C. In the chamber tumuli, however, the Carians preserved from the beginning of the Iron Age a conspicuous and distinctly non-Attic form of sepulchre.

If Thucydides was accurate in his observations, the "Carian" burials on Delos must have had something in common with actual Carian burials of the

fifth century B.C., which distinguished them from Attic burials of the same period. There are various possible criteria, of which I believe two distinguish Carian from Attic burials particularly well, viz., multiple burials in one tomb and monumental sepulchres. Two other criteria have been suggested in earlier studies: pottery and cremation.

For the modern archaeologist, pottery is the usual criterion for distinguishing cultures, but in this instance it is inapplicable. No distinctive "Carian" pottery is known. The Carians at the time of the Peloponnesian War belonged in the Athenian Empire and must have used the contemporary pottery made in Athens, not the Geometric or Orientalizing styles which had gone out of fashion centuries earlier. Even at Assarlik the pottery in the tombs is Greek, and the two fifth-century tombs of which the contents are known in part contained red-figured vases.

More can be said in favor of cremation. Cremation does distinguish the protogeometric and geometric graves at Athens from those of later periods. It was the common practice in the early Carian cemetery at Assarlik, and some of the graves opened on Delos were undoubtedly cremation burials. We do not know, however, that the practice of cremation persisted any later in Caria than it did in Attica. The bones found in the tomb at Theangela and the length of the sarcophagi in the rock-cut tombs suggest inhumation was customary in the fifth century B.C. Cremation was moreover a Greek form of burial. In the *Iliad*, a poem with which Thucydides and his contemporaries were quite familiar, it is described as the proper type of burial for a Greek hero, and the scholiast commenting on Thuc. 1.8.1 remarks that the Greeks burned their dead. Even though the Athenians themselves practiced inhumation, they would hardly identify a burial as non-Greek simply because the body was burned.

The criterion of multiple burials within a tomb does distinguish the Carian chamber tumuli of the fifth century B.C. from contemporary Attic graves. The normal Athenian burial of the late fifth century was a single inhumation grave. In Caria, however, as we know from the excavations at Assarlik

⁴² *Protogeometric Pottery* 220-221.

⁴³ *JHS* 8 (1887) 68, 70, 72.

⁴⁴ *ibid.* 70, 73, 74, 77. Herodotus remarks (5.88) that the Ionic chiton was actually Carian, and the total absence of straight pins used to fasten peplo from the tombs at Assarlik appears to confirm this.

⁴⁵ Desborough, *Protogeometric Pottery* 308-09.

⁴⁶ *JHS* 8 (1887) 70, 75-77; Fordeyke, E. J., *Prehistoric Aegean Pottery* ("Catalogue of the Greek and Etruscan Vases in the British Museum," vol. 1, 1; London 1925) 213-216, nos. A 1110-1116, figs. 300-303.

⁴⁷ Lorimer, *Homer and the Monuments* 107.

and from the sarcophagi in the rockcut tombs, the tombs were family sepulchres, designed to hold several burials. In another instance the Athenians certainly used individual graves as a criterion for distinguishing Attic burials. When they quarreled with the Megarians over the possession of Salamis, the Athenians claimed that the inhabitants of Salamis were Athenians because they buried the dead in individual graves as the Athenians did, not three or four in a tomb like the Megarians.⁴⁷ All the material in the purification deposit on Rheneia comes from single graves, whether cremation or inhumation, but we have deduced from the presence of a flourishing Mycenaean settlement on Delos that there must once have been Mycenaean tombs on the island, tombs which, like the Carian tombs of the fifth century B.C. would have been built as family sepulchres to hold a number of burials.

The other criterion which I believe is valid for distinguishing Carian from Attic burials is the monumental sepulchre. The chamber tumulus, which was the most conspicuous type of sepulchre used in Caria in the fifth century B.C., is quite unlike the contemporary Athenian grave, but it reproduces almost exactly the Mycenaean built and rock-cut tombs with their dromoi, doorways, and sepulchral chambers. The mounds which covered the Carian tombs have their parallel in the mounds heaped above Mycenaean tholoi and held in place by a low retaining wall, as Wace's investigations at Mycenae have shown.⁴⁸

The criteria of multiple burials and monumental sepulchres not only distinguish Carian tombs from Athenian; they also distinguish Mycenaean tombs from Athenian. The archaeological evidence from Delos has shown that there was a flourishing settlement on the island in the Mycenaean period. The tombs which must have been made for this settlement are represented by a single Mycenaean pyxis in the Rheneia deposit. Quite obviously these tombs did exist on Delos. Those which were not destroyed by Peisistratos were opened in 426/25 B.C., were mistaken for Carian because of their resemblance to the chamber tumuli, and were presumably de-

stroyed. The material on Rheneia comes from single burials, whether cremation or inhumation, which were identified as Greek.

Before we accept this solution, we must explain why the contents of the protogeometric graves were excluded from the Rheneia deposit as well as the Mycenaean. In Athens, the protogeometric burials are all single graves, whether inhumation or cremation,⁴⁹ and by our criteria such graves, if they were found on Delos, should have been identified as Greek and their contents placed on Rheneia. Outside of Attica, however, in Thessaly and in Crete, the inhabitants continued to bury their dead in chamber tombs or tholoi long after the end of the Late Bronze Age.⁵⁰ Perhaps on Delos too, the use of chamber tombs persisted through the protogeometric period, and hence the protogeometric burials, being made in chamber tombs like the Mycenaean, were also identified as Carian.⁵¹

If we equate "Carian" with Mycenaean, then, we find that Thucydides' statement about the method of burial fits the archaeological evidence very well. Thucydides gives two other details about the "Carian" graves, that they were distinguished by the form of the weapons they contained and that the number of Carians buried exceeded that of Greeks.

In regard to the weapons, the archaeological evidence is insufficient, for all we know about Carian arms of the fifth century is Herodotus' statement that the Carians under Xerxes used daggers and *drepanta*, which might be either sickles or scimitars, in addition to the usual Greek weapons.⁵² These weapons were surely made of iron, and in this respect they differ from the weapons found in Mycenaean tombs, which are bronze. Of the two specifically Carian weapons, it has been claimed by Poulsen and Rhomaios that the *drepanta* are represented by the iron sickles in the Rheneia deposit.⁵³ Sickles of this type, as Rhomaios has carefully pointed out,⁵⁴ are found at other Greek sites, to say nothing of their presence in two Greek graves on Rheneia belonging to the late fifth century B.C. Consequently, as Plassart has said,⁵⁵ it is hardly likely that these sickles were used as a criterion for distinguishing the "Carian" graves from the "Greek."

⁴⁷ Plut. *Solon* 10.4-5 quotes Hereas of Megara, Jacoby *FGrHist* 486F4.

⁴⁸ *JHS* 74 (1954) 170; *BSA* 50 (1955) 198, 209-221.

⁴⁹ The only exception to this, so far as I know, is a grave in the Agora which contained the bones of two children (*Hesperia* 5 [1936] 23-24).

⁵⁰ Desborough, *Protogeometric Pottery*, 306, 307.

⁵¹ On the basis of the earliest geometric pottery found in the

purification deposit on Rheneia, we may date the change from chamber tomb to individual grave about 800 B.C.

⁵² Herod. 1.171.

⁵³ Poulsen, *MonPiot* 16 (1909) 31-32; Rhomaios, *Deltion* 12 (1929) 212-223.

⁵⁴ *Deltion* 12 (1929) 212-223.

⁵⁵ Plassart, *Delos* 11, 49, n. 7.

They are not only Greek, but they were still being put in graves at the time when Delos was purified by the Athenians. On the other hand, it is possible that some other implement or weapon found in the "Carian" graves was mistaken for the Carian *drepanon*. Daggers, the other type of "Carian" weapon mentioned by Herodotus, are certainly found in Mycenaean tombs,⁶⁶ but without either the daggers from the Mycenaean tombs on Delos or Carian daggers of the fifth century B.C., we cannot tell whether these were alike in form or different in form as well as material.

R. M. Cook has argued that the word *skeue* used of the weapons in this passage means simply the furnishing of weapons, not the type.⁶⁷ Remarkably few weapons were found in the Rheneia deposit, although the weapons of the eighth to fifth centuries B.C., being made of iron, would have been rusted and unfit for salvage when the graves were opened. The custom of placing weapons in graves, which was characteristic of the Mycenaean and Protogeometric periods as well as the Geometric, may therefore have died out about the same time that burial in single graves replaced the use of chamber tombs. Tempting though this hypothesis may seem, we have far too little archaeological evidence about the weapons to verify it.

Finally Thucydides says that more than half the persons buried on Delos were Carians. The difficulties of reconciling this statement with the distribution of pottery in the Rheneia deposit have been mentioned earlier. We cannot know, of course, the number of Mycenaean tombs on Delos nor the number of persons buried in them. Nonetheless it is quite reasonable for the total number of persons buried in chamber tombs to have exceeded those represented in the Rheneia deposit in view of the prosperity of the Mycenaean settlement on Delos and the long period of time during which chamber tombs were presumably used.

Thucydides says that the Carian pirates were driven out of the islands by Minos some time before the Trojan War (1.8.2-4). The Tombs of the Hyperborean Maidens date the Cretan mastery of Delos to the Middle Bronze Age, long before the Mycenaean chamber tombs which we have identi-

fied as "Carian" came into use and even longer before the arrival of the Carians at Assarlik, which must be dated to the beginning of the Iron Age, after the Trojan War. Obviously Thucydides' chronology does not agree with the archaeological evidence. If the Carians were driven out of the islands by Minos, there should be evidence for an occupation of Caria by people from the Aegean during the Middle Bronze Age, not at the beginning of the Iron Age. Fortunately Herodotus provides a different account which offers a solution to the discrepancy. He says that the Carians, though subject to Minos, remained in the islands until they were expelled by the Dorians and Ionians.⁶⁸ Two invasions of the islands are involved, the first by Minos of Crete which resulted in the introduction of a Minoan type of tomb on Delos and the second by the Dorians and Ionians, after which some islanders may have fled to Caria and settled at Assarlik. Thucydides simply misinterpreted the evidence. He was familiar with the written and traditional history of Greece rather than with the changes and development of its material culture. For him Minos was a contemporary of Theseus, a Greek king driving out a non-Greek people, and his invasion would mark the end of multiple "Carian" burials and the introduction of single "Greek" burials.

SUMMARY

Earlier analyses of Thucydides 1.8.1 have failed to take into consideration the archaeological evidence in Delos and Caria as well as that of the purification deposit on Rheneia. A flourishing settlement existed on Delos in the Mycenaean period, which must have had one or more cemeteries. The Carian chamber tumuli, which were in use in the fifth century B.C., preserve the form of Mycenaean rock-cut and built tombs. Both the Carian tumuli and the Mycenaean tombs differ markedly from Attic graves since they are monumental sepulchres designed to hold a number of burials. Thucydides must therefore be describing Mycenaean tombs on Delos which were identified as Carian because they looked like the tombs still used in Caria. We do not have enough evidence to identify the weapons mentioned, but the size of the Mycenaean settle-

Mycenaean tombs since we have none from Delos or Caria to compare them with.

⁶⁶ BSA 50 (1955) 267-268.

⁶⁷ Herod. 1.171.

⁶⁸ The cemetery at Prosymna produced a representative group of Mycenaean daggers (Blegen, C. W., *Prosymna: The Helladic Settlement preceding the Argive Heraeum* [Cambridge 1937] 330-338). It is useless to catalogue all the daggers found in

ment is compatible with the number of burials estimated by Thucydides.

The earliest occupants of Delos were a people whom Thucydides identified as Carians from their place of refuge. At the beginning of the Middle Bronze Age, the Cretans under Minos conquered the island (Thuc. 1.8.2, Herod. 1.171) and introduced a peculiarly Minoan type of sepulchre (Tombs of the Hyperborean Maidens). In the Late Bronze Age, the island was the seat of a flourishing community which was Mycenaean in culture and buried its dead in Mycenaean built or chamber tombs. The continuity of the cult of Artemis evidenced by the discovery of objects from the Mycenaean-Geometric shrine within the foundations of the later Artemision⁵⁹ suggests that this population remained the same from the Mycenaean period into the Classical, but an invasion of the Aegean islands by Dorians and Ionians (Herod. 1.171) caused the flight of some islanders to Caria at the beginning of the Iron Age (Assarlik). These peo-

ple, who were subsequently known as Carians, brought with them the characteristic Late Minoan type of tomb and continued the Minoan/Mycenaean burial practices except for the substitution of cremation for inhumation. In Delos the use of chamber tombs lasted until approximately 800 B.C. when it was abandoned in favor of individual graves of the Greek type. The tradition of an emigration from the islands to Caria lingered among the Greeks. Consequently, when the Athenians purified Delos and found Mycenaean chamber tombs which resembled the tombs currently in use in Caria, they identified them as "Carian." The contents of these "Carian" graves were either destroyed or dumped in some place yet unknown while the contents of the "Greek" graves were collected and placed in an enclosure on the island of Rheneia where they were discovered by Stavropoulos in 1893.

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⁵⁹ Gallet de Santerre and Treheux, *BCH* 71-72 (1947-1948) 148-254, esp. 248-54.

Observations on Chaironeia

W. KENDRICK PRITCHETT

PLATES 80-81

The excavations of Soteriades, and the studies of Kromayer and Hammond, have done much to fix the topography of two battles fought at Chaironeia in 338 B.C. and 86 B.C. respectively. But there still remain topographical points about which there is doubt.

About the three streams in this region, which in antiquity were named the Molos, Haimon, and Morios, Hammond has written, "It is primarily upon (their) identification . . . that modern controversy about the battles turns."¹ As a result of visits totalling some five days to modern Kaprina (Chaironeia) and the neighboring region,² I would like to offer two suggestions which might throw some light on passages referring to two of these streams in the vicinity of ancient Chaironeia.

The first suggestion concerns the *rheuma* Morios, which is mentioned by Plutarch in connection with the battle of 86 B.C. between Sulla and Archelaos. The Morios flowed beneath a rugged conical mountain called Orthopagos.³ Since Plutarch was writing out of his first-hand knowledge of the topography of his native place, we must accord a weight to his description which we are usually forced to deny to his topographical comments on other battles. As to the identification of Orthopagos, Hammond wrote, "I did not see . . . any peak to which the term 'conical' could be particularly applied."⁴ G. Mylonas and E. Kirsten in a *RE* fascicle published in 1942 refer⁵ only to Kromayer's identification of Orthopagos with the ridge which carries on its southeastern shoulder the acropolis of ancient Chaironeia, or Petrarchos.⁶ Kromayer had earlier written about the application of the phrases "rauhe Spitze" and "kegelförmigen Berg" to the ridge of Mt. Thourion:

¹ *Klio* 31 (1938) 187-188.

² During a period in 1955-56 when the writer was a holder of a John Simon Guggenheim Memorial fellowship, for which grateful acknowledgement is here accorded.

³ *Sulla* 17.7: κορυφὴ τραχεῖα καὶ στροβιλῶδες δρός. Reiske emends to στροβιλῶδης δρός. The numbering is according to the text of Lindskog-Ziegler.

⁴ *op.cit.* 193 n. 1.

⁵ *s.v.* Orthopagos 1490.

⁶ *Schlachten-Atlas*, Griechische Abteilung (Leipzig 1926), Blatt 5, no. 10; and *Antike Schlachtfelder in Griechenland* II (Berlin 1907), Karte 10 and pp. 367ff.

"In der ganzen näheren Umgebung von Chaironeia gibt es keine andere Kuppe, auf welche diese Charakterisierung zutrifft."⁷ I would question, however, whether the shape of the Chaironeia ridge suggests the description "kegelförmigen Berg," and Kromayer's identification was for good reasons rejected by Hammond.⁸

In addition to the shape of Orthopagos, Plutarch tells us that part of Thourion was higher than the conical mountain. He states that a force of Chaironeians under Erykios passed unseen along a path which was over the heads of the Pontic detachment occupying Orthopagos. He continues that it was possible either to stone the enemy from above, or to force them into the plain.⁹ Presumably, then, this peak of Mt. Thourion was at the edge of the plain.

One other possible clue is contained in the statement that Sulla chose this particular *korophe* where the Pontic detachment was enveloped to plant a trophy of the battle.¹⁰ Clearly, the peak was a prominent landmark.

If one approaches Chaironeia either from the north, on the modern highway, past ancient Parapotamoi or from the west from Arachova to Daulis along the Cleft Way and down into the plain, no more striking position could be discovered than the small mountain or peak which is the very northernmost spur of Mt. Thourion. More importantly, this peak, if viewed from the north or northeast, is clearly conical in shape. The photograph reproduced herewith (pl. 80, fig. 1) shows its clearly cone-like nature.¹¹ It was taken from a position near where the road from Agios Vlasis (near the ruins of ancient Panopeus) joins the modern highway.

⁷ *Schlachtfelder* II 368.

⁸ Soteriades, whose excavations of the two mounds in the plain did so much to increase our knowledge of the battles of 338 and 86 B.C., located Orthopagos some four kilometers to the southeast of Chaironeia at "die steile Felswand der heutigen Képara" (*AM* 30 [1905] 115 n. 2). Hammond has fairly conclusively shown that the peak must lie west of Chaironeia.

⁹ *Sulla* 17.15.

¹⁰ *Sulla* 19.10.
¹¹ The conical nature of the mountain is not indicated on the various published plans of the battle. It can be inferred, however, from the contour lines on the Greek Staff Map (1933), Levadha sheet.

Moreover, this peak would seem to me the only part of Mt. Thourion which answers to Plutarch's description.¹² If seen from the acropolis of Chaironeia or from the southeast, the mountain loses much of its conical nature; for a narrow saddle runs from it southwards to the main mass of Mt. Thourion. At the low point of this saddle is located today the small church of Agios Georgios. The *rheuma* which flowed to the west of this mountain must have been the Morios.¹³ This identification of the *rheuma*, it should be noted, is the same as that of Leake¹⁴ and Hammond,¹⁵ who connected the Morios with the torrent which flows past the modern church of Agios Charalambos, near which are the remains of the Turkish hamlet of Mera or Meraga.¹⁶

My second observation concerns the *rheuma* Haimon, earlier named the Thermodon,¹⁷ which Plutarch states "flows past the Herakleion where the Greeks were encamped" (*παραρρεῖ παρὰ τὸ Ἡράκλειον, ὅπου κατεστρατοπέδενον οἱ Ἐλλῆνες*).¹⁸ He continues that after the battle of 338 B.C. this river was filled with blood and corpses.

To any student of the celebrated battle which extended the Macedonian power over all Greece, the location of the Haimon becomes critical for determining the position of the Greek left flank, held by the Athenians, as opposed to the Macedonian right flank, led by Philip. The Greek right flank has almost surely been fixed by Soteriades' excavations. Before 1902, a mound located near the western base of Mt. Akontion, directly across the plain from Chaironeia, had been associated with

¹² No one who will examine this mountain from its base will question the suitability of Plutarch's characterization of it as "rugged." To the viewer from the highway the fact that the modern peasant has not plowed on its slopes will bear the same testimony.

¹³ When I visited the area in May, 1956, the stream carried a considerable volume of water, for it drains the entire valley south of Agios Vlasis (ancient Panopeus). The plain here is "dead flat," to use Leake's phrase, and the present stream bed need not, of course, have been the ancient course. Within recent years, the course of the Mavronero River has been considerably altered, and the bridges over the old course still remain on the modern highway.

¹⁴ *Travels in Northern Greece* II (1835) 199. Leake visited Boeotia in 1805.

¹⁵ *op.cit.* 193.

¹⁶ Leake used the form "Mera" and this has been followed on some modern charts. The natives today refer to the place as "Meraga" (?). The valley is covered with tiles and sherds of the Turkish period. In connection with ruins of this area, I can report that at the northwestern base of Orthopagos there are the remains of a small Byzantine church of the tenth or eleventh century, built in part of large ancient blocks. One block was

the grave of the Macedonians and regarded as marking the place of heaviest engagement on Philip's left flank. Soteriades, however, discovered stone tools and idols of clay and stone which indicated that the mound was prehistoric: it contained no trace of graves from the period of the battle of 338 B.C.¹⁹

Satisfied that this mound was not the Macedonian polyandron attested in Plutarch as being not far from the Kephissos river,²⁰ Soteriades investigated a second mound, rising to a height of 23 feet above the plain, which is located two and one-fourth kilometers to the east of the first and due south of the village of Bisbardi. Earlier, it was thought that this mound belonged to the time of Sulla's campaign. The excavation proved rather that it dated from the fourth century B.C. On the level of the plain a great funeral pyre had been erected. Completely charred or half-burnt logs could still be distinguished in the caked mass of ashes and bones. The height of the layer of ashes was 0.75 m. at the center. In addition to vases of the fourth century and two bronze Macedonian coins, Soteriades discovered extraordinarily long lance-heads (about 15 inches) which he identified as the Macedonian sarissas.²¹ These are now on exhibit in the Chaironeia museum.

With Soteriades' establishment of this tumulus as the polyandron of the Macedonians, it has seemed reasonable to all who have subsequently studied the battle that this mound marked the position of the Greek right, where the loss was presumably the

re-used as a capital. The date was suggested to me by Professor Vanderpool and seems confirmed by the evidence of sherds which may be found in abundance in the surrounding fields. The remains of the church are a few yards north of a modern shrine of Agios Basilius.

¹⁷ Fiehn, *RE* s.v. Thermodon 2395, oddly confuses our Haimon with the brook Thermodon near Tanagra.

¹⁸ *Demosthenes* 19.2.

¹⁹ The results of Soteriades' excavations at Chaironeia are published in *AM* 28 (1903) 301-330, 30 (1905) 113-129; *Praktika* (1902) 53-59, (1903) 40, (1904) 35-57, (1907) 108-112, (1909) 123-130, and (1910) 159-167; and *ArchEph* (1908) 63-96. For English readers, the account of A. S. Cooley in *Records of the Past* 3 (1904) 131-143 will prove useful, particularly since Cooley quotes personal letters from Soteriades as well as articles to a Smyrna newspaper. Indeed, Cooley gives valuable information which is not to be found in Soteriades' own publications.

²⁰ *Alexander* 9.3.

²¹ For the history of the sarissa, which was introduced at this period by Philip II (Diod. 16.3), see Lammert, *RE* s.v. Sarisse 2515.

greatest for the invaders. The only plausible explanation which has been offered for their anchoring their line at this part of the plain, south of that suggested in any previous study of the battle, would be to cover the passage to Levadeia and Thebes along two routes, that of the modern highway and that of the Kerata Pass. In case of defeat, a good line of retreat would be open.²²

Both Hammond and Braun, the two most recent students of the battle, would place the Greek left flank on Hill 177, more specifically on its western slope (Hammond).²³ Hill 177 comprises the end of the ridge which divides the Kerata valley from the Lykuressi valley. Hammond, in his study of the battle of 86 B.C.,²⁴ has undertaken to show that the stream which flows into the Chaironeia plain from the rather broad valley at the foot of the Kerata pass was the Molos, not the Haimon. This leaves for the Haimon either the stream which flows out of the valley behind the Lion monument or the stream flowing through modern Kapraina (or Chaironeia). When Plutarch spoke of the Haimon he described it simply as flowing past the Herakleion. If it had flowed past the acropolis out of the valley of Chaironeia itself, it would have been natural so to characterize it. Soteriades located the Herakleion at the modern church of Agia Paraskeve, built in part out of an ancient temple. This church is on a small plateau well within the Lykuressi valley. His main point was that there was, in connection with the temple, an ancient building which resembled a small gymnasium, and he cited parallel examples where gymnasia were placed beside temples of Herakles.²⁵ Plate 80, fig. 2 is taken from within the valley, looking north-eastwards, and shows the church to the left.

There is one other bit of evidence which may help to identify the Haimon in the light of Plutarch's statement that the Greek camp was at the Herakleion beside the Haimon. When bulldozing operations were under way in March, 1956, to clear the area around the church of the Panagia in the Modern village of Kapraina, I took the opportunity

to search the area for sherds from the cleared space eastward to the northern edge of the mountain-promontory. Plate 81, fig. 3 shows the church in the midst of a large square in the right middle distance. The area lies entirely on the eastern half of the Kapraina valley and some distance up the slope. I followed a path made by the bulldozer. The newly turned earth revealed numerous pieces of glazed classical roof-tiles and several pieces of classical pottery, as they were kindly identified by Miss Lucy Talcott. Eight pieces of each have been placed in the Agora museum. We must conclude, I believe, that the ancient town of Chaironeia was built on both sides of the stream at the mouth of the valley, just as the modern village is, but possibly not advancing so far into the plain.²⁶ On the other hand, I discovered no classical sherds in the Lykuressi valley. This entire valley is, to be sure, thick with sherds, much more so than the Kapraina valley; indeed, I saw literally hundreds of pieces on the cultivated surface. But all the tiles I could discover were unglazed and of a deep red color, clearly non-classical. They reflect a period when Chaironeia must have been much larger than either the fourth century city or the modern village.²⁷ If we conclude that the Kapraina valley was occupied by dwellings in 338 B.C., the Lykuressi valley unoccupied, we must then reconsider Plutarch's statement that the Greek camp was near the Herakleion beside the Haimon. Clearly, this large camp would not be in a valley occupied by the houses of the ancient town. The identification of the Lykuressi stream, the largest in the area, with the Haimon, already suggested by Soteriades and Hammond, now becomes even more probable.

If we place the main Greek camp in the Lykuressi valley, which has several deep pockets,²⁸ we must conclude, I believe, that a defensive position which had been chosen to be held for some months²⁹ would have covered the mouth of this valley. The Greek left flank would have extended then to the ridge which separates the Lykuressi and Kapraina

²² See Hammond, *op.cit.* 203 and Braun, *JOAI* 37 (1948) 88. It is unfortunate that Braun in 1948 seems to have known nothing of Hammond's article, published in Germany in 1938.

²³ The choice of this oblique line, running almost due east and west, may have been planned to give the numerical superiority of the Greeks a tactical advantage over the greater manoeuvrability of the Macedonian phalanx; cf. Braun, *op.cit.* 89.

²⁴ *op.cit.* 188-201.

²⁵ *AM* 30 (1905) 119.

²⁶ Earlier Soteriades reported ancient remains "stretching from the left bank of the brook westward to a distance of about 400 m. (1/4 mile) and having the highway as a northern boundary." See Cooley, *op.cit.* 140.

²⁷ The city was destroyed in the great earthquake of A.D. 551 (*Procop. Goth.* 4.25).

²⁸ See pl. 81, fig. 4, which was photographed at the entrance to the valley. The lion monument is to the right.

²⁹ See Hammond, *op.cit.* 205.

valleys.³⁰ Plutarch states that, in the course of the battle, the Haimon became filled with blood and corpses; it must have flowed through the midst of the fighting on the left flank. The only criticism which could be brought against this position is the length of the Greek line.³¹ On Kromayer's map (No. 10) the distance from the tumulus to the end of the ridge (just beneath the *o* of the word Chäronea) measures a little more than 6½ inches, which equals 3,200 m. Kromayer's estimate of the Greek hoplite strength was 34-36,000 and of the cavalry 2,000.³² Allowing fighting space of one meter per man for the hoplite of this period,³³ the Greek front without any space between units would be 3,200 hoplites. Kromayer's figure of 36,000 would permit a depth of more than 11, whereas the normal depth was 8. The space between the tumulus and the base of the ridge need not, then, be regarded as too wide. On the contrary, as with Plataia, modern scholarship has erred in trying to compress a large army into too small a space. This lengthy phalanx presented the possibility, moreover, that Philip, inferior in numbers, might be outflanked and encircled or pushed back to the Kephissos.

No commentary on the battle of Chaironeia would be complete without allusion to a passage in Polyaenus 4.2.2, which has been the center of recent topographical discussions: Philip gave way before the Athenian charge on his right flank until he brought his men to higher ground (*ὑπερδεξίων τόπων λαβόμενος*). Grote apparently considered that this statement of Polyaenus was contradicted by another (4.2.7) which was "more likely to be true":³⁴ the Athenians could not endure fatigue like the Macedonian veterans. As Tarn has reminded us about Polyaenus' extracts, "Some items are historically valuable, others worthless; each one

³⁰ Hammond (213) places Greek light-armed high up on this ridge, but leaves the base of the ridge and part of the Greek camp to Philip's light-armed.

³¹ Efforts to determine the width of the battle-line from estimates based on the smaller Macedonian phalanx, which had to advance against an established position, seem pointless.

³² *Schlachtfelder I* 195.

³³ So Kromayer-Veith, *Heerwesen* (München 1928) 79 and 358, and Hammond, *op.cit.* 206.

³⁴ *History of Greece* XI 305.

³⁵ *Oxford Classical Dictionary* (Oxford 1949) 710. The Macedonian rhetorician was a sort of military anecdote-monger who conceived of the art of war as a bundle of conjurer's tricks.

³⁶ *op.cit.* 209.

³⁷ *AM* 28 (1903) 303 footnote. On the further side of the plain Soteriades noted there was no change in ground-level.

must be judged separately."³⁵ Assuming, however, that the extract in the 4.2.2 is correct, we have two possible interpretations of the passage: (1) that of Kromayer that Philip swung only his right flank backwards onto the foothills in a movement which left a wide gap between the right and the center; and (2) that of Hammond, that the entire Macedonian phalanx contracted into closer order as the Athenians on the Greek left wing advanced. In the case of the first, the southern foothills of Mt. Thourion may be regarded as the "higher ground on the right" (*ὑπερδεξίος*). In the latter, the higher ground must now be found not at the bank of the Haimon, as Hammond locates it,³⁶ but at that of the Kapraina stream. This latter hypothesis requires the assumption that there was in antiquity rising ground in the plain where there is none today. This assumption might be justified on the basis of Soteriades' observation that the ground-level at the Lion monument near the entrance of the Haimon valley was in the fourth century B.C. two meters lower than it is today.³⁷ On the whole, however, this writer believes that the Polyaenus 4.2.2. item, giving two colorful exclamations of opposing generals, is too anecdotal in nature to be made the basis for the topographical reconstruction of the battle. When we reflect that several recent students of the battle have had to reject the explicit identification of the Lion monument by Pausanias, whose accuracy has been so often confirmed, and a statement of Strabo of similar inference, the refusal to make this fragmentary anecdote the center of a topographical reconstruction of the battle will seem understandable, particularly since it seems to be at variance with the second extract (4.2.7).

There remains a word to be said about the Lion monument of Chaironeia.³⁸ Beloch,³⁹ Costanzo,⁴⁰

Mt. Hedylion and Mt. Akontion on the north ridge of the plain are entirely rocky; on the other hand, there is much earth and clay on the lower foothills of Mt. Thourion and these are today extensively cultivated. The abundant flora of antiquity is attested by the fact that Chaironeia was noted for the manufacture and sale of medicinal and fragrant herbs and for the exportation of salves and cosmetics. See Oberhammer *RE* s.v. Chaironeia 2033.

³⁸ The typology and symbolism of monumental lions has been discussed by O. Broneer, *The Lion Monument of Amphipolis* (Cambridge 1941) 42-47. In reply to those who wish to regard the lion as an exclusively Macedonian or Alexandrian invention, it is enough to refer to the lion set up at Thermopylae over the tomb of Leonidas (Herod. 7.225) and to the fifth century lion of Thespiai, the earliest preserved monument of this type. For the lion as a funerary type see the bibliography

and Hammond⁴¹ have been unwilling to associate it with the dead of the Theban Sacred Band. Hammond wishes it "to show the point where Philip checked his retreat," and regards it as marking the burial place of the dead from the Macedonian right flank. Pausanias (9.40.10) states that the Lion monument surmounted a common grave of the Thebans. Strabo (9.2.37) refers to "public tombs of those who fell in the battle."

We are unwilling to question the honesty of Pausanias; but, since he says there was no inscription on the Lion monument, the point is made that here his authority is not decisive. On the contrary, it seems difficult to believe that a well-informed Greek would not know the ascription of the monument even several centuries after the battle. The joint testimony of Pausanias, who did not take his topography at second-hand, and Strabo should be decisive.

In the excavations of the enclosure of the Lion monument 254 skeletons were found, laid in seven rows. We know that the Theban Sacred *lochos* totalled 300;⁴² the two figures seem sufficiently close to give strong confirmation to Pausanias' statement.

Moreover, these bodies were interred, whereas the dead of the Macedonian tumulus were cremated. Diodorus states that Philip collected his dead into a tomb (singular) and offered sacrifices.⁴³ When Plutarch states that the three hundred were lying dead,⁴⁴ he probably means the number as an approximation. The statement in Justin 9.4.6 that Philip compelled the Thebans to pay for the privilege of burying their dead is evidence that the dead were indeed actually buried. The judgment that "It is highly improbable that in the lifetime of Philip Thebes was able to commemorate her dead by erecting a proud Lion"⁴⁵ is a subjective and disputable one, and can hardly prevail against the identifications of Pausanias and Strabo. A truer estimate of Philip's character, in my opinion, is that of Pickard-Cambridge: "If it served his purpose to inflict final and crushing disaster, he did not shrink from it; but he was equally ready to be generous and forgiving, if some larger purpose was served thereby, and his natural instinct probably inclined him towards such a course."⁴⁶

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in Roger, *BCH* 63 (1939) 22, n. 2.

³⁹ *Gr. Geschichte* III/2² 303-304.

⁴⁰ *RivFC* 51 (1923) 61-70.

⁴¹ *op.cit.* 216-218.

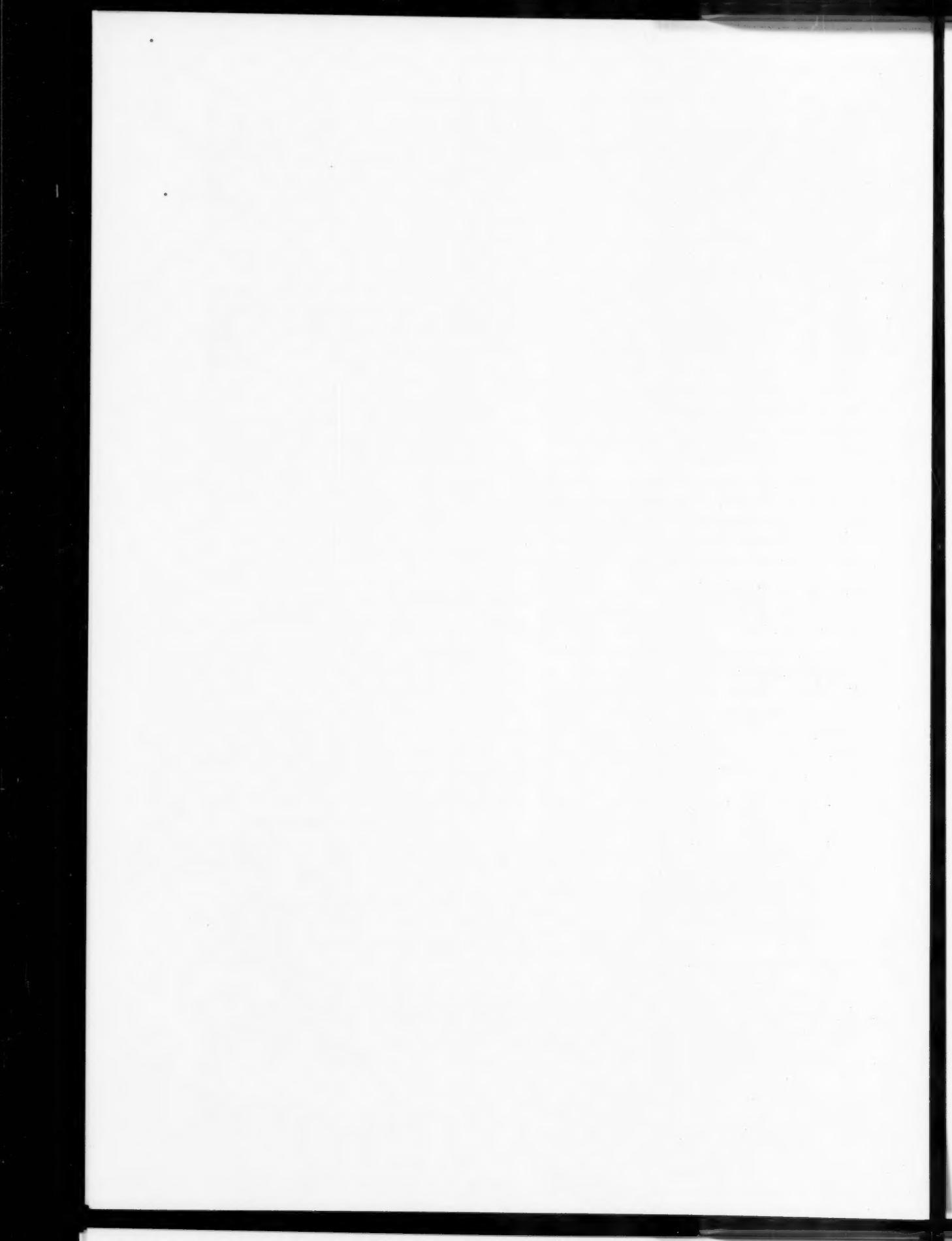
⁴² Polyaeus 2.5.1; Plutarch, *Pelop.* 15, 16 and 18. Cf. Lammert, *RE* s.v. *Δοχαγός* 945.

⁴³ 16.86.

⁴⁴ *Pelop.* 18.

⁴⁵ Hammond, *op.cit.* 217.

⁴⁶ *CAH* VI 270.



The Ransom of Hector on a New Melian Relief

J. WALTER GRAHAM

PLATES 82-83

In the course of transferring the storage material belonging to the Greek Department of the Royal Ontario Museum to more accessible quarters an unpublished and well-preserved Melian Relief was recently discovered (pl. 82, fig. 1). The history of this relief, which came to the Museum in 1926 (Acc. no. 926.32), will be discussed later. First let us describe it and give some consideration to the use of this class of terracotta relief.¹

The relief represents the Ransom of Hector. This subject does not occur on any other known Melian Reliefs, although themes from the Homeric cycle are common on them, for example: Penelope and Odysseus, The Recognition of Odysseus, Ajax and Cassandra, The Armor of Achilles, and Orestes and Electra at the Tomb of Agamemnon. The first of these is extant in at least seven copies, and several of each of the others is known. Our piece is of particular interest, therefore, for its uniqueness.

The maximum dimensions of the relief are 25.5 by 19.5 cm. Before it came to the Museum it had been put together from several pieces, set in beeswax and mounted in a wooden frame. It has now been disassembled and carefully reconstructed with only the addition of a little plaster along the lines of the breaks; save for fragments missing from the bottom molding the relief is complete.

The upper top corners of the plaque were trimmed by the maker to follow, more or less closely, the lines of the figures; this is very characteristic of the Melian Reliefs. The clay is buff, smooth, and rather soft and friable. The peculiar series of curving parallel striations on the reverse (pl. 83, fig. 4), also very typical of this class of reliefs, have been explained by Miss Richter as produced in the process of removing the excess clay with the aid of a string pulled in a rotary motion.² The back is far from flat, and seems to have warped

considerably in the firing, producing a bulge visible to the left of the central figure. Apparently the whole surface was covered with a white slip (also a characteristic feature) and much of the background was painted black; a good deal of the black is preserved in the lower half of the relief. Black was also used for some details such as the hair, eyes, and beard of the left-hand figure, also for his epaulette-ties and the curved bands following the neck-line at the top of the cuirass. A considerable amount of a yellowish tone is visible on the top and body of the chest, and traces of pink can be seen on the flesh-parts of the various figures. There also seems to have been a band, about 2 cm. broad, along the top of the relief on the background, brownish or reddish in color. A tiny spot of brilliant blue is to be seen near the bottom edge of the tunic of the left-hand figure.

The nude body of Hector lies supine in the foreground of the picture. The legs are slightly drawn up, the left more so than the right; the arms are extended by the sides, only the left being visible; the head is in a somewhat fallen-back position. The abdomen is plastically modeled.

The right-hand figure is certainly that of Priam³ wearing an himation with the loose end thrown over his head, which is bowed in grief (pl. 82, fig. 2). His right hand, resting on his forehead, further expresses his feelings; his left grips a long staff and at the same time supports the right elbow. The mass of the himation over his stomach suggests the local obesity common to senescence, while the spare limbs and the loose skin on the beardless face finely express his age.

On the left, a male figure holds a helmet of Thracian type⁴ in his right hand; the other is outstretched and resting on an object which will be described later. He is evidently wearing a cuirass

the University of Durham, who has been preparing a study of several new reliefs, and has been good enough to read my manuscript, making numerous important suggestions. I lay claim, however, to all errors the article may still contain.

¹ *AJA* 36 (1932) 205; *BMMA* 27 (1932) 45.

² Though considered to be female, and so Hecuba, in the document (mentioned below) accompanying the relief.

⁴ *Jdl* 27 (1912) 317ff.

¹ The *locus classicus* for the Melian Reliefs is the very thorough study and corpus by Paul Jacobsthal, *Die melischen Reliefs* (Berlin 1931), cited hereafter as *MR*. I would like to express my thanks to Mrs. Neda Leipen, Assistant in the Greek and Roman Dep't. of the Royal Ontario Museum for her valuable help in studying this relief. I have also had the benefit of a discussion of the relief with Dietrich von Bothmer of the Metropolitan Museum, and, by letter, with Brian Shefton of

with traces of a gorgon's head in the center. Shoulder-pieces are held in place by strings crossing the cuirass obliquely and tied to a ring or rings a little above the belt which is concealed by a loose mantle-like piece of cloth about his waist. Visible below the cuirass is a short chiton. The features suggest those of a mature man, the mien solemn and concentrated. It can be no other than Achilles. His face is in profile to right, his upper body nearly full front, and his legs in a three-quarter position, the feet hidden behind the corpse.

The third standing figure is that of a young man wearing a short tunic under a plain leather cuirass. I had supposed him to be one of the two squires, Automedon and Alkimos, who replaced Patroklos, but von Bothmer has pointed out to me that by "Lung's rule"⁵ he should be a Trojan and therefore an attendant of Priam. This is supported by the fact that the sole of a sandal can be made out under his left foot; Priam is almost certainly also wearing sandals. The young man stands in an erect but relaxed attitude, his left hand extended along the left thigh and holding a light rod which points obliquely downward to the left—its purpose we shall consider later;⁶ his right hand is extended and holds, rather easily it would seem, a somewhat bulky object the nature of which we shall also consider later. The head of the young man (pl. 82, fig. 2) is finely differentiated from that of the older hero and the grieving father.

The rectangular object immediately behind the corpse is clearly intended for a chest with the lid opened back; the yellow color plentifully preserved on it indicates that the material is wood. The chest is paneled and equipped with two knobs corresponding to knobs on the top of the lid (not visible), for the cord which could be wound about them and sealed if desired in order to safeguard the contents from tampering. Both paneling and knobs may be easily paralleled on chests in fifth-century Greek vase-paintings.⁷

⁵ According to "Lung's Rule" the head of the corpse in such scenes regularly is placed next to his "party," Lung, *Memnon*, 38-40, as cited by Beazley, *Attic Vase Paintings in the Museum of Fine Arts, Boston*, II (1954) 14.

⁶ Of the existence of the rod there is no doubt; it stands out clearly in relief. It is almost certainly not a caduceus since there is no sign of the head of a caduceus in the visible length of the rod, and it is to say the least unlikely that the artist would conceal this distinctive feature behind the lid of the chest; nor are there any other visible signs to justify an identification of the figure as Hermes, as one might be tempted to do.

⁷ E.g. Richter, *Ancient Furniture*, 87-99, figs. 238f; for a

Above the chest is the frame of a large pair of balances. This consists of a heavy horizontal member flat on the bottom and crowned on the top; at the ends are vertical supports terminating below in two-pronged forks, and reinforced at the top by curving braces. From the center of the horizontal member of the frame the beam of the balance is hung by a cord.⁸ The scale-pans and their contents are concealed behind the body of Hector, but distinct traces of the three suspension cords to each of the pans are visible. The light rod in the left hand of the attendant points toward the cords suspending the right-hand scale-pan and perhaps served to check the oscillation of the balance in the process of weighing.

While the general intent of the scene is thus quite clear there is still some doubt as to its exact interpretation. Representations of the Ransom of Hector on vases and metal-reliefs during the 6th and 5th centuries B.C., as recently collected by Bulas,⁹ are divided into two main schemes: the earlier, with the corpse and Hermes, while Priam entreats Achilles; the later, with Achilles on a couch, eating, and the body beside or beneath. Neither of these types of representation are therefore of any assistance in understanding just what is going on in our relief, which follows a different iconographical tradition.

There can scarcely be any doubt that what is being weighed, or is about to be weighed, is gold. This is made clear enough from the literary tradition. In the *Iliad* (22.349-352) Achilles relentlessly replies to the pleas of Hector: ". . . not even should they bring ten or twenty fold ransom and here weigh it out . . . not even were Priam, Dardanus' son, to bid pay thy weight in gold . . ."; and in *Iliad* 24 (line 232) Priam does weigh out ten talents of gold before he departs on his mission (at sixty pounds to a talent enough to ransom several Hectors, pound for pound, one would think!). Surely none of the other objects, clothes, coverlets,

recent discussion and bibliography on chests see Pritchett, *Hesperia* 25 (1956) 220-26. Chests are mentioned in connection with the garments selected to form part of the ransom of Hector, *Iliad* 24.228.

⁸ On the right end of the horizontal member of the frame are traces of a figured decoration, perhaps dolphins, in low relief. Between the right end of the beam and the frame what appears as a narrow vertical rod may represent a device intended to limit the oscillation of the beam of the balance.

⁹ Bulas, *Les illustrations antiques de l'Iliad* (Lwow 1929), an article in *Eos* 34 (1932-33), 246ff, and one in the *AJA* 54 (1950), especially pp. 114, 118.

tripods, etc., which Priam brought with the gold, would be weighed.

It might be expected that the object held in the hand of the attendant could provide a decisive clue, but unfortunately this does not seem to have been given a very distinct shape, and to make matters worse it is slightly damaged along the top and possibly along the left-hand edge. It can hardly be intended for an ingot of gold, to judge by the ease with which it is held in the outstretched hand; but it is possible that a vessel of gold is meant, for gold vessels were frequently treated as bullion.¹⁰ In that case, too, the large size of the chest becomes more reasonable, and the fact that its cover is open suggests that an object has just been removed from it for the weighing.

Prof. Brian Shefton, with whom I have been in correspondence concerning the Toronto relief,¹¹ believes, however, that the scene represented is much more significant than a mere weighing of the gold—that the body is, in fact, to be weighed against the gold. In later antiquity the body is actually shown on the scales,¹² and this is probably what Vergil, for example, had in mind (*Aeneid* 1.484):

exanimumque auro corpus vendebat Achilles.

But the literary pattern—and probably from this the scheme in art—was apparently set in the first half of the 5th century B.C. by Aeschylus, since two scholiasts, commenting on the passage in *Iliad* 22 quoted above, remark that in his play, the *Phrygians*, the weighing of the body against gold, contemplated in Achilles' remark, was represented literally; and Hesychius in his *Lexikon* (s.v. *ἀνθρόπος*) refers to the same Aeschylean passage.¹³

At first, I must admit, I was inclined to be skeptical of this view, particularly because the body, as shown in the relief, was so large in proportion to the scales,¹⁴ and in any event the actual weighing of the body was certainly not in process. However, due emphasis on the significant elements of the story, not realism in detail, is to be expected; and the balances, at any rate, are large, solidly-built

¹⁰ This is discussed briefly in an article pp. 112-120 in *Phoenix* 11 (1957), "Auri Sacra Fames." Compare for the shape of the object and the way it is held in his hand the (gold) bowl carried by one of Priam's attendants on the vase referred to in note 33.

¹¹ For example on a Roman sarcophagus in Woburn Abbey, Michaëlis, *Ancient Marbles in Great Britain* 751, pl. x, no. 219.

¹² These passages are all conveniently brought together in the *Supplementum Aeschyleum* (1939) edited by H. J. Mette, no. 97.

¹³ In the sarcophagus relief mentioned in note 11 the body

ones, not the usual small portable scales. As for the moment of the action selected for representation, the time preceding the weighing rather than the actual weighing itself, contemporary parallels such as the preparations for the chariot-race in the east pediment of Olympia may readily be found.

"The relief is thus," as Shefton remarks in a letter, "the earliest representation of the Aeschylean motive and joins the two Choephoroi, and perhaps the Niobid relief, as witness to the strong influence of Aeschylean drama exercised on these monuments."¹⁴

The next earliest known representation of the weighing of the body against gold occurs on an early-fourth century Italiote volute-krater (pl. 83, fig. 5) from Ruvo in the Ermitage.¹⁵ The lower part of the balances, including the scale-pans, are restored, and inaccurately so, but otherwise they resemble those in the Toronto relief in having a beam suspended from a sturdy frame and in the existence of angle-braces between the horizontal bar and the vertical posts. The krater-scene represents a later moment: the body is actually being carried to the scales for the weighing. In other respects there is no resemblance between the two scenes, for the representation of the vase is an elaborate composition in cavalier perspective and includes about a dozen figures.

Two holes in the unoccupied space between the figures on our relief bring up another important question: how were the reliefs used? The evidence of excavation amounts to little. Few have been found in regular excavations, most of them in graves, one in a shrine at Kos, and a small one in a house of poor quality at Olynthus.¹⁶ The fact that most of the known specimens are said to have been found in graves signifies little. They may have been made as household decorations, for almost no houses of the period of the manufacture of the reliefs have been excavated; even the Olynthian houses of the regularly-planned district are all somewhat later.¹⁷ Objects used in the home were often

extends far beyond the scale-pan on both sides.

¹⁴ MR, nos. 105, 81.

¹⁵ Baumeister, *Denkmäler*, fig. 792, from *MonInst* V, 11; Stephani, *Die Vasensammlung der Kaiserlichen Ermitage* I, no. 422; the balance is shown in *DarSarg* s.v. *Libra*, 1224, fig. 4467.

¹⁶ Olynthus XIV, 230f, no. 291, pl. 98, from House B vi 3, g; *ibid.* XII, 117. It may be doubted that this is really a Melian relief.

¹⁷ *ibid.* VIII, 13-15.

deposited with the dead; at Olynthus, for example, figurines of identical types were found both in the houses and in the cemeteries. And we know that the Greco-Egyptian portrait paintings of later times were framed and hung in the houses of the living, to be taken down and cut to fit the mummy-wrappings of the dead.

The only means available for determining how the Melian Reliefs were used is therefore the objects themselves. One point is clear: that they were meant to be placed against a contrasting background, since in many (as in nos. 8-10, pl. 83, fig. 3) the figures are completely silhouetted by cutting away all parts of the relief except the figures themselves; in others, such as nos. 1 and 3, only *some* of the *interior* areas have been removed; but even in the rest, such as nos. 2, 4, 5, 6, and 7, the plaques are silhouetted, for the most part, along the sides and top.

Two theories have been proposed as to the *kind* of background the reliefs were designed to be used against: first, that they were hung against the walls of rooms in the houses of the living; and second—the theory favored by Jacobsthal—that they were fastened to the sides of wooden boxes, chests, or coffins, as a cheap substitute for overlay of gold and ivory, and often placed in the grave. In this view he has been followed by Miss Richter in her recent handbook (1953) to the Greek Collection in the Metropolitan Museum, and by Higgins in his publication (1954) of the Terracottas in the British Museum;¹⁸ it has also been accepted by Beazley.¹⁹ Nevertheless I believe the matter should be reconsidered.

To decide between these two possibilities the method of attachment should provide some indications. In the first place, it is unlikely that some form of adhesive was used since none has been observed on the back of the reliefs; however it is conceivable that being of vegetable composition it might have disappeared without trace.²⁰ Secondly, in the large majority (about 70%) of the reliefs illustrated by Jacobsthal no special provision for attachment is evident and, though in some of them this may be due to the fact that portions are missing, it is clear that most of the reliefs, especially those of small size and/or irregular outline, had none.

¹⁸ Richter, G.M.A., *Handbook of the Greek Collection* (1953), 79f, pl. 62; Higgins, R.A., *Catalogue of Terracottas in the British Museum I* (1954), nos. 609-23, pls. 79-83.

¹⁹ DLZ 52 (1933), col. 2132, a review of Jacobsthal's book.

²⁰ Theophrastus (*H.P.* 5.7.6) uses the term *παρακολλήματα*,

This reduces us for direct evidence of attachment to a dozen or so which are pierced—clearly before firing—by small holes. In five certain cases (three of which are illustrated in our pl. 83, fig. 3, nos. 5-7) there is but one hole; in four certain cases there are two holes (all illustrated: nos. 1-4). In three other reliefs one hole is preserved, but there may have been two. In a single instance (no. 9) there are four holes.

Were these holes intended for suspension-strings, or were they, as Jacobsthal calls them, *Nagellöcher*, nail-holes? This is an important question for our purposes for, if the reliefs were merely suspended from a string through one or two holes near the top edge, then obviously Jacobsthal's theory of their use to decorate chests or the like becomes untenable. Yet a decision in favor of nail-holes would far from constitute proof that the decorative appliqué theory is the correct one, for one of the most serious objections to this is that in order to keep the reliefs from rattling against the wood and either shifting out of their proper position, or breaking when the object was moved, they would have to be nailed so firmly in place that the head of the nail would be brought into direct contact with the clay surface. Yet to do so would clearly expose the fragile plaque to serious risk of breakage. On the other hand to attach a plaque to a house-wall—which is not subject to being moved about—it would only be necessary to drive the nail firmly into the plaster or adobe brick, while leaving a safe margin between the nail-head and the clay surface of the relief.

The suspension of objects by strings or otherwise from the walls of a Greek house, for purposes of decoration or convenience, is a well-known practice. For example we may think of the mirrors, kylikes, pitchers, writing-tablets, swords, braziers, etc. to be seen on innumerable vases of the 6th to the 4th centuries, or the plaques (of terracotta?) hanging from a pair of horns fastened on a wall in the famous foundry scene on the Berlin Vase.²¹ Actual clay masks, plates, etc. of this period are frequently provided with two small holes close together and properly located at the top of the object for suspension by a string.²² There is even a series of small Melian Reliefs in the form of roosters which have two holes similarly placed and which

"things glued on" to refer to ornamental work, in wood, on chests etc.; cf. Pritchett, *loc.cit.* 232.

²¹ *ARV* p. 263 no. 1.

²² A good example of a plate is illustrated in *Vases in Toronto I*, 96-98 (no. 283).

would permit them to hang properly from a loop of string (pl. 83, fig. 3, no. 11).

Indeed when we return to the series of large Melian Reliefs illustrated in pl. 83, fig. 3, I think that the unprejudiced observer would presume from the position of the holes that nos. 1-7 and 10-11 were meant to be hung by strings. For the hole or holes are located near the top of the relief, rather close together, and so placed that a loop of strings running from them to the suspension-nail would not pass across a significant part of the picture. At the worst a string from the left-hand hole of no. 2 would cross the man's arm—the horizontal portion of the string would of course be arranged so as to pass behind the relief²³—while the other hole has been very carefully located so that the string running obliquely to the left from it would run across the narrow piece of background between the sword held by the figure left of center and the face of the wounded man at the right. If the plaques had been intended for nailing against a wooden background (the objections to this have already been mentioned) the holes would surely have been spread reasonably near the four corners of the plaque, in fact somewhat as in no. 9 (which is in actuality about the same size as most of the other reliefs in pl. 83, fig. 3), and I have no doubt that this relief was really fastened by four nails, but probably *not* to a chest. Indeed no. 9 constitutes the exception which helps to establish the rule: if the holes on the other plaques had been intended merely for nails the maker would, as here, have probably been much less concerned about where he placed them, for a small nail-head would not seriously disfigure his design whereas a suspension string obviously would do so.²⁴ If we ask why strings rather than nails were preferred (as we believe) for hanging the reliefs I think the answer is simply that when so hung the relief could be easily removed whenever desired, whereas an attempt to withdraw the nails might well result in fracturing it.

Jacobsthal makes much of the point that the suspension-hole or -holes are often not well centered and the relief would therefore not hang straight. Since from this he draws the conclusion that they were not intended for suspension but for nailing to

²³ A separate loop of string could have been used in each hole, but this is certainly less likely.

²⁴ Instead of a nail a string with a knot tied in the end so as to prevent its being pulled through the hole would be a possibility; but I cannot believe that the holes were deliberately

a chest or the like we must consider this argument in some detail.

The new Toronto relief, at any rate, will hang perfectly when suspended by a simple loop passing through the two holes, and it was this fact indeed that led me first to doubt the general validity of Jacobsthal's theory of the use of the reliefs. Relief no. 2 (pl. 83, fig. 3), probably, and no. 3, possibly, could also be hung in the same fashion, but because of the variable thickness of the reliefs it is impossible to be certain short of experiment with the actual piece. No. 10, with but a single hole, would hang in such a position that the body of the youth would slope upward as if the sphinx were carrying it aloft, and this was clearly the intention.²⁵

There are some plaques, nevertheless, with two holes, such as no. 1, which are so off-center that it would be difficult to balance them from a string and they would soon jar out of proper position. And there are others with but a single off-center hole, such as nos. 5, 6, and 7, which it would be quite impossible to hang properly from a string. We seem then to have reached a crux.

Yet there is, I believe, a very simple solution. It will be noticed that in all the reliefs illustrated in pl. 83, fig. 3, except no. 10 there is a continuous projecting molding along the bottom edge, termed the *Standleiste* by Jacobsthal (MR 109f). This projecting molding is in fact such a regular feature of the larger reliefs, even in cases where it is not really needed as a ground-line, that one might easily imagine that it had a practical as well as an aesthetic function: either it served as a platform for the relief to rest on a horizontal bracket or ledge projecting from the wall or on the floor of a small wall-niche, or—as I consider far more likely—the plaque was maintained in a horizontal position by simply supporting it on two nails driven into the wall below and near the outer ends of this molding in such a way that the heads of the nails were flush with and overlapping the front face of the molding.²⁶ The single instance (pl. 83, fig. 3, no. 9) where holes have been left near either end of the molding itself provides suggestive confirmation of this conjecture. It also has the advantage of simplicity and of not introducing any novel method of suspending the reliefs since occasionally, as in no. designed for any such makeshift device.

²⁵ *Pace* Jacobsthal, MR 20.

²⁶ This might explain the peculiar curved breaks in the molding of two reliefs, MR nos. 78 and 83, the last our no. 7 (pl. 83, fig. 3); cf. also MR 108.

9, they may have been entirely suspended by nails set in special holes, while a great many, such as no. 8, whose outline was suitable for this method, must have been held by the overlapping of nail-heads driven close to the contours at convenient points.

Perhaps we should admit in conclusion that while the larger reliefs were probably designed to be suspended by a string through the holes and further supported by two nails below the bottom molding there was probably considerable variation in practice. At any rate I feel we can definitely conclude that the reliefs were made primarily to adorn the interior of houses, the nails being driven into the plaster-over-adobe-brick wall. The bright red, with which house walls were commonly painted, would form a fine background to their contoured outlines.²⁷ Like any other household object which had pleased the living, they might be later placed in the grave with the dead.

That the reliefs were manufactured on the island of Melos seems assured by the fact that perhaps one-fifth of the known specimens were found there, and that very few have been found at any other single site.²⁸ The present relief contributes its mite of supporting evidence for, as we shall see, it was found in Melos in or before 1854, that is some fifteen years or more, according to Jacobsthal, before the theory of a Melian manufacture became current and therefore a natural dealer's provenience.

The provincial style of the reliefs makes them particularly hard to date. By comparing them with Attic vases Jacobsthal concluded in his original study (1931) that the Melian workshop was active for a period of less than half a century, perhaps about 475-440 B.C. Beazley and Miss Richter later suggested lowering the terminal date to the beginning of the Peloponnesian War and with this Jacobsthal concurred.²⁹ I would place the Toronto relief near the end of Jacobsthal's middle group, well beyond the archaic style of the early, but not quite as advanced as the last and smallest group with its three-quarter faces. The dignity, the "ethos" of the figures, and the relaxed ease of their postures indicates that the relief is, especially considering its provincialism, not earlier than the sculptures of the Parthenon. A date about 440 B.C. might be suggested. Perhaps the closest of the reliefs published

by Jacobsthal is the footwashing of Odysseus, the best preserved copy of which is the one in the Metropolitan Museum.³⁰ We may compare in particular the plastic rendering of the corpse of Hector with that of the standing Telemachos in the center of the Metropolitan relief, and the pensive attitude of Penelope with that of Priam.

We shall close with an account of what is known of the history of the Toronto relief. The earliest known reference to it has been provided by Dietrich von Bothmer who noted an entry in Sotheby's Sale Catalogue for Feb. 8, 1854, as lot no. 50, the description of which, thanks to the kindness of Peter Corbett of the British Museum who checked the reference in the B.M. copy, I can quote here:

"A Pinax or Picture, on a terracotta slab, with figures in basso-rilievo, which have been painted in various colours, considerable vestiges of which remain; the female figure (possibly Hecuba) mourning, the two male figures offering a libation on an altar in the centre, and a corpse extended at the base thereof, are probably meant to represent the death, during the Trojan war, of Hector, son of Priam and Hecuba."

"Size 10 by 7½ inches. Melos."

"This excessively rare tablet is worthy of particular attention and study; the holes at the top shew that it has been suspended as a picture."

"L6. Moore, Mo."

Firmly glued to the back of the frame in which our relief was still mounted was a document (pl. 83, fig. 6) signed by "Morris Moore" and dated "June 27th 1854." This document reproduces the text of the Catalogue item, merely amplifying "Melos" to "Found at Melos," and adding the comment, "Brought to England by the Honble Charles Murray. H.M.B.'s Consul in Egypt." This added comment originally read, "Brought to England by Mr. Murray," and was changed by the same hand but in a different color of ink at some later time.

Lot no. 50 was one in a long list of items headed in the Sotheby Catalogue: "Catalogue of an interesting and important collection of antiquities and coins collected during an official residence of many years in Egypt and Greece." Clearly the unidentified owner was the Hon. Charles Murray; the purchaser, Morris Moore. Of Moore I have been unable to find anything further, but Murray

²⁷ *Olynthus* VIII, table pp. 301-03.

²⁸ *JHS* 59 (1939) 67f.

²⁹ *DLZ* 52 (1931) col. 2133; *AJA* 36 (1932) 205; *JHS* 59

(1939) 69, note 15; and cf. Higgins, *op.cit.* 165, who would date them about 465-435 B.C.

³⁰ Richter, *op.cit.* 80, pl. 62d.

is well known and the facts substantiate the Catalogue entry except perhaps for the residence in Greece.

Sir Charles Augustus Murray (1806-95) was the second son of George Murray, 5th earl of Dunmore, "an exceedingly handsome and agreeable young man, with a strong taste for general literature, and an excellent classical scholar." Murray was indeed a man of parts, for he spent three months in 1835 wandering with the Pawnee Indians in the western United States with accompanying narrow escapes, and in 1849 he brought England its first hippopotamus, thus earning the sobriquet of "Hippopotamus Murray"! He became Her Britannic Majesty's Consul General in Egypt in 1846, where he remained till 1853 when he was appointed to Berne as minister to the Swiss confederation. Returning to England in 1854 he was selected to proceed as envoy and minister-plenipotentiary to the court of Persia.³¹

A penciled note at the foot of the document adds that "Mr. Sutton (an English dealer) sent this (to the Royal Ontario Museum), Sept. 1926." This is confirmed in the records of the Museum correspondence at this time.³² However, probably due to the ill-health of the curator at that time, who died shortly after, the relief seems to have been neglected for several years. Then the new curator, J. H. Iliffe, as we learn from Museum correspondence dating back to 1931, prepared an article on the relief probably for the *JHS* and consulted Pryce of the British Museum. He in turn showed the article to Jacobsthal whose *Die melischen Reliefs*, which was intended to be a corpus including all Melian reliefs then known, had either just appeared or was in the press. Misled, we believe, partly by knowing the relief only through a poor photograph showing it still within its Victorian mounting, partly by the failure of anyone to identify the two objects correctly as a chest and balances, and partly by the resulting misinterpretation of the scene by Iliffe as a late and obscure version of the Polyxena myth, Jacobsthal declared it a forgery. Iliffe therefore withdrew his article and retired the relief to

storage, without, however, making any notation in the Museum records of his reasons for doing so.

Of the genuineness of our relief there cannot be the slightest doubt. Shefton and von Bothmer agree with me on this point. The clay, traces of color, working of the reverse of the plaque, and the general style all are in agreement with well authenticated examples of this group of reliefs.

Perhaps the most objective evidence favoring the authenticity of our relief is the scene itself. The figures are nowhere exactly paralleled but all are perfectly plausibly conceived. The chest, though rare in the Ransom scene at this period, and different from those in the Brygos-painter's well-known representation,³³ is perfectly normal for the period. The balances, an even rarer element of the scene, are of rather too unusual a type for a forger to have introduced, yet they can also be adequately paralleled in detail. The mere fact that neither the chest nor the balances can be too readily identified even by modern archaeologists, as I discovered both from showing the relief to some of my friends and from the provisional description entered thirty years ago in the Museum catalogue which referred to the balances as an altar and to the chest as a "table-like machine," provides further assurance that it was not designed for sale to collectors of the mid 19th century.

Several months ago I sent Prof. Jacobsthal photos of the relief and a copy of a draft of my article, but having no memory of having seen the relief previously and professing to be out of touch with the Melian Reliefs, he passed on the ms., with my approval, to a former pupil of his, Prof. Brian Shefton, with whom I have had the correspondence already referred to.

The relief has now been hung in the way advocated above,³⁴ in one of the Museum galleries, against a red background to represent the common color of plaster used in the rooms of the Greek houses of this period.

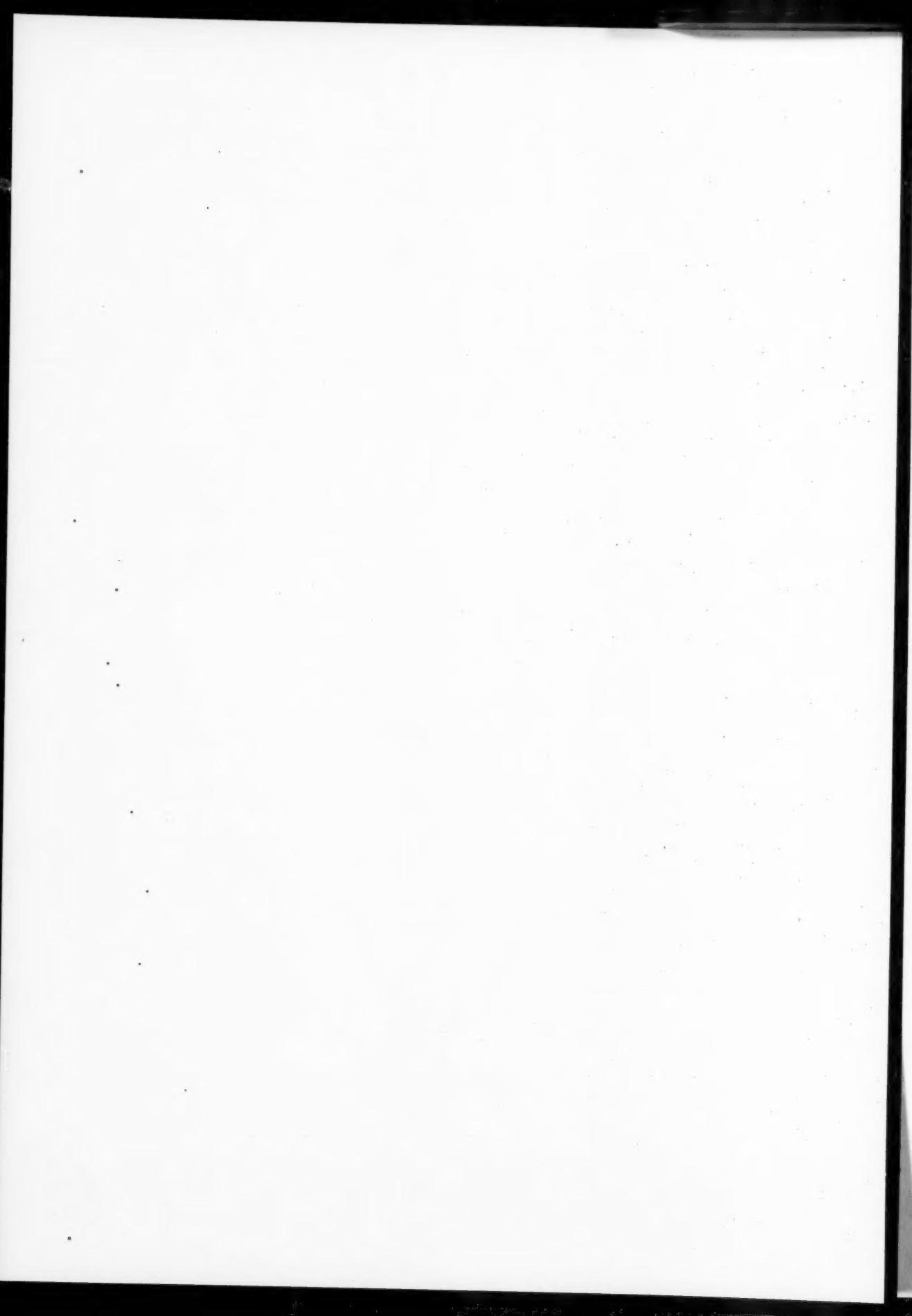
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³¹ Most of this information and this quotation have been derived from the article "Murray, Sir Charles Augustus 1806-95" in the *Dictionary of National Biography*, suppl. 3 (1901); see also Sir Herbert Maxwell, *The Honourable Sir Charles Augustus Murray* (1898).

³² The Melian Relief was purchased together with six other unrelated objects for a lot price of £55.

³³ *ARV* 253, no. 129.

³⁴ Mr. Shefton, I am happy to say, finds my explanation of the use of the reliefs "very convincing."



News Letter from Greece

EUGENE VANDERPOOL

PLATES 84-87

ATHENS AND ATTICA

ACROPOLIS, SOUTH SLOPE. Mr. Meliades pushed ahead vigorously with the excavation of the area below the Odeion of Herodes. The sanctuary of the Nymphs, the existence of which in the area had been suggested by graffiti on vases found in 1955, was located. It is a small open air shrine elliptical in shape and surrounded by a low rubble precinct wall. Two plain stelai which stood in it were discovered, one of them still *in situ*, the other fallen. A boundary stone of the fifth century B.C. found in the area, though not *in situ*, is inscribed "Boundary of the Sanctuary of the Nymph." The use of the singular, "nymph," instead of the plural is noteworthy; no doubt some special local nymph is meant. Thousands more fragments of red-figured loutrophoroi belonging to the votive deposit of the sanctuary were added to those found in 1955. In an earlier stratum were fragments of votive vases of the sixth century B.C. The sanctuary seems to have been abandoned before the Roman period.

CITY WALL. Another section of the city wall was cleared in the block between Dragatsaniou and Aristeides Streets (W. Judeich, *Topographie von Athen*², Plan 1, G-2). This part of the circuit has long been known (cf. Judeich, *op.cit.* 128; *AJA* 61 [1957] 281-82) but the section cleared in 1957 was unusually well preserved (plate 87, fig. 9). A stretch of some forty meters was exposed on the Dragatsaniou side of the block. About twenty-five meters of this was preserved to a height of 8 courses (3.50 m.) and was constructed of solid conglomerate masonry six meters thick. Through the efforts of Mr. Threpsiades a large part of the section exposed was saved from destruction and will be visible in the basement of the large office building being erected on the site.

MUSEUMS. The prehistoric galleries in the National Museum have been opened to the public. The large central hall contains objects of the Mycenaean period from various sites. Two side galleries have prehistoric material from the Cyclades and mainland Greece respectively. Besides the familiar objects from older excavations, a generous selection

of recent finds is on exhibit. Two cases are given to selected objects from the grave circle outside the walls of Mycenae, another has jewelry and inlaid daggers from the graves near Pylos. Representative tablets with Linear B script from Pylos and Mycenae are also on display.

Mrs. Stathatos' priceless collection of jewelry and other objects had been presented to the National Museum and is on display in a special gallery.

The Numismatic Museum has put on display a representative selection of coins.

ANAVYSSOS. From the Anavyssos region Mr. Papadimitriou reports the chance discovery of a fragment of a grave relief representing a mother holding a child in her arms, a most unusual subject for the archaic period (pl. 86, fig. 5). The border of the mother's garment, which runs from her shoulder to the child's head, is decorated with a painted meander pattern.

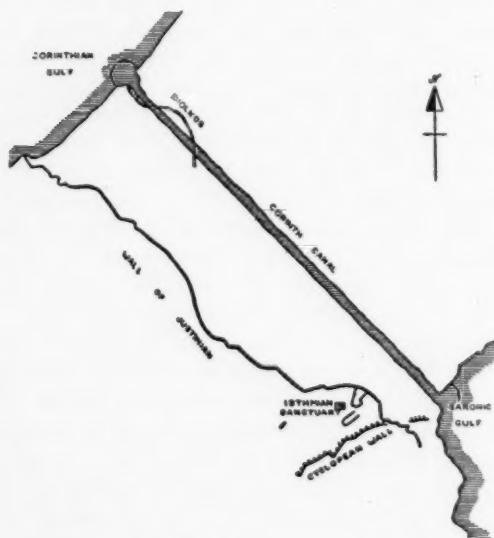
CAVE NEAR MARATHON. Early in 1958 some peasants from Marathon who were out hunting examined the place where a fox went to earth and discovered the mouth of a cave. Their discovery was reported to the authorities, and Mr. Papadimitriou at once investigated. Beyond the narrow entrance the cave opens out into a series of large low rooms. A trench dug in the first room revealed a filling at least two and a half meters deep containing masses of pottery. A great many Neolithic vases and fragments, some of them with painted patterns, have already been found. There are also fragments of Early, Middle and Late Bronze Age vases. The cave was reoccupied in the fifth century B.C. and remained in use throughout classical antiquity. Among the finds that date from the classical period are some red-figured kylixes and a statuette of Pan. Mr. Papadimitriou believes that this is the cave mentioned by Pausanias at the end of his account of Marathon (1.32.7). "A little way from the plain is a mountain of Pan and a grotto that is worth seeing; its entrance is narrow, but within are chambers and baths, and what is called Pan's herd of goats, being rocks which mostly resemble goats." The cave hitherto identified as that men-

tioned by Pausanias (cf. J. G. Frazer, *Pausanias's Description of Greece* II, 439) is on the same hill as the newly discovered cave, though somewhat lower down. No antiquities have been reported from the old cave, however, so that the new one with its evidence of occupancy over a long period is a much more likely candidate.

OROPUS. Mr. Papadimitriou reports the chance discovery in the town of Skala Oropou of three tripod bases with inscribed dedications to the Sea Nymph (Halia Nymph). The bases were taken to the Amphiarion for safe keeping.

PELOPONNESUS

ISTHMUS OF CORINTH: DIOLKOS. Through the kindness of Mr. Verdelis it is now possible to give further details of the *diolkos*, the ancient portage for ships across the Isthmus of Corinth, whose chance discovery was briefly reported in last year's *News Letter*. In view of the great interest of the discovery Mr. Verdelis conducted a systematic excavation, clearing a stretch 160 meters in length and, by means of soundings, establishing the course of the *diolkos* for a distance of 1500 meters from its west end (Ill. 1).



Ill. 1. Sketch map of Isthmus of Corinth, showing course of *diolkos* and Cyclopean wall

Starting at a point a little south of the western entrance of the modern canal, the *diolkos* first swings a bit to the northeast crossing the line of the

canal, then in a broad curve it swings back to the southeast and recrosses the canal. By means of these broad sweeping curves, the *diolkos* follows the easiest gradient to the saddle of the isthmus some 90 meters above sea level.

The western end of the *diolkos* had long been known; at least it had been supposed that a broad sloping area of pavement constructed of large blocks at the edge of the sea was the place where ships were drawn out to be portaged across the isthmus (H. N. Fowler in *Corinth* I, 49-51). This supposition is now seen to be correct. The best preserved section of the *diolkos* proper is that uncovered in 1956 north of the canal in the area belonging to the Military Engineers School (AJA 61 [1957] pl. 83, 3). From this we see that the *diolkos* was a paved roadway 3.50 to 5.00 meters wide. Two deep grooves parallel to each other and 1.50 meters apart run down the center of the road and were obviously designed to receive and guide the wheels of the trolley on which the ship was carried. At one point, these grooves are replaced by low parapet walls for a distance of about 28 meters.

The *diolkos* dates from the archaic period, probably from the reign of the tyrant Periander (c. 625-585 B.C.). Evidence for this is to be found in isolated letters in the archaic Corinthian alphabet carved on some of the blocks of the pavement near the parapet. A few fragments of pottery found beside the pavement furnish corroborative evidence. It will be recalled that Periander is said to have considered cutting a canal through the isthmus (Diogenes Laertius, 1.799). We know that he never did so, but we see now that, if a canal was too ambitious a scheme for him, he nevertheless did construct a practical substitute, the *diolkos*.

A fuller account, with numerous illustrations, is to be found in *ILN*, October 19, 1957.

ISTHMUS OF CORINTH: TRANS-ISTHMIAN WALL. Mr. Broneer conducted a short campaign of excavation in and around the Sanctuary of Poseidon in preparation for a full campaign in the spring of 1958. The most interesting results were obtained in the course of a search for a fortification wall across the Isthmus earlier in date than the reign of Justinian, at which time the only known line of wall was built. A short stretch of wall in the village of Isthmia, about a kilometer east of the Sanctuary of Poseidon, was investigated and proved to be of Mycenaean date. This wall was traced westward as far as the Sanctuary of Poseidon, but beyond that

point no certain traces appeared (Ill. 1). The two faces of the wall are made with large, undressed stones, and the space between them is filled with smaller stones and earth (pl. 86, fig. 7). In this fill many sherds of L.H. III B pottery were found, and also one almost complete vase. Some of the preserved sections of the wall have small, buttress-like towers, projecting only 0.70 m. from the face of the wall. It seems impossible that this wall can be anything but a trans-Isthmian fortification. Its construction in the second half of the thirteenth century B.C. would coincide with the beginning of the hostile incursions from the north that culminated in the Dorian Invasion.

MYCENAE. The road leading up to the citadel is being widened. In the course of this operation further remains of the House of the Oil Merchant which had been discovered and excavated by the late Professor Wace (*BSA* 48 [1953] 9-15) came to light. Work on the road was held up while Mr. Verdelis, Ephor of the Argolid, conducted an excavation. Early accounts report the discovery of a hearth and chimney in one of the rooms, of numerous stirrup vases and fragments of painted wall plaster, and most important of all of a complete inscribed tablet and fragments of a number of others.

TIRYNS. The Cyclopaean walls have been cleared of earth that had gathered against their foot, and some fallen blocks have been replaced along the west side. In the course of this work fragments of painted wall plaster from the Mycenaean palace were discovered.

LERNA. Mr. Caskey conducted another campaign at the prehistoric mound of Lerna partly devoted to excavation and partly to conservation.

The major architectural discoveries of the season were made on the southeastern flank of the mound. Walls that had been found previously in trial trenches were cleared in an extensive area and proved to be parts of a defensive circuit, which must have enclosed the whole site in early phases of the Early Helladic period, antedating the House of the Tiles. This defensive system, built and rebuilt in successive stages, comprised two massive parallel walls and a space about 2 m. wide between them, divided by partitions into rooms that served as living quarters. Many whole pots, including saucers, bowls, sauceboats, an askos, and a beaked jug were found on their floors. Built with these walls in two distinct phases were substantial towers,

the earlier hollow, communicating by a doorway with the interior of one of the compartments, the later roughly rectangular, considerably larger, and solid. Rising from the ancient level of the plain outside and approaching an entranceway there is a monumental stairway carefully constructed of overlapping flagstones. This passes under the second tower and is probably to be assigned to the period of the first (pl. 87, fig. 10).

In order to preserve the architectural remains that have been exposed and to leave the site in a state intelligible to students and visitors, various conservation measures were taken. The most important of these was the construction of a shelter over the Early Helladic palace known as the House of the Tiles.

OLYMPIA. There was no excavation at Olympia in 1957, but progress was made on piecing together the finds from the area of the Workshop of Pheidias. Many large molds for drapery, similar to those illustrated and described in *AJA* 60 (1956) 271, plate 97, 2, have now been mended. The drapery style seen in these molds is said to be not earlier than the thirties of the fifth century. There are also many molds for glass, some of them quite large, the petals for one palmette being thirty cms. high. Many of the fallen columns of the Palaistra have been re-erected. Ancient material was used exclusively, and no new stone was introduced anywhere. Early in 1958 work was resumed in the Stadium for the first time since the war; the earth overlying the track is being removed and used to reconstitute the south embankment. It will be recalled that the German Institute plans to restore the Olympic stadium to the form it had in the fourth century B.C. It was simply an earth embankment with seats for officials only.

LEONTION. Mr. Yalouris reports the discovery and partial excavation of a theater at Leontion near the village of Agios Vlasis fifty kilometers from Patras on the road to Kalavryta (Ernst Meyer, *Peloponnesische Wanderungen*, 111-116). The theater lies near the gate in the city walls. Trial trenches revealed eight rows of seats, partly built and partly cut out of the rock, the parodoi, and part of the scene building.

CENTRAL AND NORTHERN GREECE

MEGARA. The famous fountain of the tyrant Theagenes which Pausanias tells us (1.40.1) was worth seeing for its size, its decorations and the

number of its columns, was cleared under the supervision of Mr. Papadimitriou. Some soundings had been made in 1899 by the German Institute, and the general scheme of the fountain had been established (*AM* 25 [1900] 23-33; see also Elderkin *AJA* 14 [1910] 47-50). The new excavations have now cleared almost the whole of the basin, and the rows of beautifully cut octagonal columns of shell limestone, and the fine grey limestone masonry of the walls make a most impressive sight. Elderkin's conjecture that the fountain was divided into two halves by a low wall along the line of the central row of columns proves correct, except that the division was actually made by means of slabs set between the columns and not, as Elderkin had suggested, by a wall with columns on top of it. Furthermore, there are seven cross rows of columns in the basin, making 35 columns in all, and a row of pilasters behind the inner wall of the draw basin forms an eighth cross row of interior supports. Two joining fragments of a poros relief representing a woman seated facing front with her feet on a stool probably formed part of the sculptural ornament of the fountain (pl. 86, fig. 6). In early Christian times a church was built in the eastern half of the basin. It is hoped that more property can be acquired so as to expose the façade of the building.

KARDITSA. Mr. Theocharis reports the chance discovery of a tholos tomb at a place known as Kouphia Rachi between the villages of Georgikon and Xynovrysi about ten kilometers southwest of Karditsa in Thessaly. The tomb is said to be in a good state of preservation and to be about nine m. in diameter and nine m. in height. Although the tomb has been looted, it is thought that it may still repay further investigation, and a search must be made in the neighborhood to locate the settlement to which it belongs.

PELLA. The most important new excavation of the year was that at Pella, the birthplace of Alexander the Great, and the capital of Macedonia in its greatest period from the late fifth century B.C. until its conquest by the Romans in the battle of Pydna in 168 B.C. The site of Pella had long been known, but apart from tumuli in the outskirts of the city and a few isolated walls and scattered blocks, there were no conspicuous remains. The only excavation that had been attempted was that of the Greek Archaeological Society, under the direction of the late Professor Oikonomos in 1914 and 1915. This excavation, interrupted by the first World War,

revealed parts of some large private houses and some of their bronze furnishings (*Praktika* [1914] 127-148, and [1915] 237-244; *AM* 51 [1926] 75-97).

In April 1957 work was resumed as a result of the chance discovery of two columns in the cellar of a private house that was being constructed. The excavations, which were of a trial nature at first, soon developed into a full scale operation under the direction of Messrs. Makaronas and Petsas of the Greek Archaeological Service.

First a general exploration of the site was carried out. Dozens of trial cuts were made, and the approximate extent of the ancient city was established. The built up area was found to cover about 3½ square kilometers. Several important buildings were located on the summit of two hills and on their southern slopes which descend gently towards the former Lake Yannitsa, now completely drained.

The sector chosen for the main excavation lies in the center of the area as a whole. It is near the main Salonica-Edessa highway at the point where a side road branches off to the village of Old Pella, the distance from Salonica being about 38 kilometers. Here a large building (called building 1) was discovered which dates from about 300 B.C. Its width from east to west is about 50 m. and its length is at least 90 m.; its southern end has not yet been located.

The central part of this building consists of a series of three large courtyards surrounded by colonnades. Many of the Ionic columns belonging to the northern courtyard were found; there were six on each side of the court, or 20 in all. A fourth court lacked colonnades but was paved with a pebble mosaic in geometric patterns (rhombi alternately dark and light, with a border of running dog pattern around the whole).

In the west wing of the building are four rooms, originally roofed, whose floors are decorated with mosaics. These mosaics are made with natural pebbles and have figured panels in the centre. The first shows Dionysos riding a panther (pls. 84, 85, figs. 1 and 2). He is nude and holds a thyrsos in his left hand, while with his right hand he grasps the panther's neck. His profile is outlined with a thin strip of lead, and similar strips are used to pick out details such as his eye, ear and toes. Strips of another metal of a dark color are used for some of the strands of his hair. Colored pebbles are used for various details and lines of interior drawing, and the white pebbles used for the body are carefully

chosen and laid in such a way as to bring out the modelling. This mosaic is a masterpiece, and its effect must approximate very closely that of monumental painting.

Other mosaics show a lion hunt (pl. 85, fig. 3), a griffin bringing down a stag (pl. 86, fig. 4), and a pair of centaurs, male and female (not illustrated).

The streets that surround the building on three of its sides have been partly cleared. They are as much as ten meters in width, showing the generous scale on which the capital was laid out.

Among the small finds we may mention various architectural members of marble and stone, roof tiles, some of which are stamped, iron nails from doors with bell shaped bronze heads 0.11 m. high and 0.12 m. in diameter, and quantities of wall plaster of excellent quality in vivid colors, white, black, red, grey and yellow. These and other small finds such as vases and terracotta figurines are kept in a temporary museum on the site.

ISLANDS

AIGINA. Restoration work on the temple of Aphaia has proceeded, and in 1957 the east cella wall was reconstructed and the colossal lintel block of the east door, which had been lying on the floor, was set in position again (pl. 87, fig. 11).

SAMOTHRACE. Some excavation was done in the ancient cemetery on the west bank of the stream south of the sanctuary. The cemetery was thickly filled with tombs of great variety of date and type. One hundred and sixty-three identifiable tombs extending over a period of six hundred years were

found in the small area excavated. There was evidence that many more tombs had been destroyed by later installations and that no care was taken to avoid disturbing existing burials. The earliest tombs date from the middle of the sixth century B.C., the latest from the first century A.D. Attic vases include a fine Panathenaic amphora, a black-figured pelike with a scene of a dancing goat, and a tall red-figured amphora with a single figure on each side. A unique object found in a pithos burial along with some terracotta figurines, plaques and other objects of the early third century B.C., deserves special notice. This is a solid clay model, about four cms. in diameter, of an air-inflated ball (pl. 86, fig. 8). The use of air-inflated balls in ancient games is known only from passages in Martial referring to play with a light ball called *follis* (bladder) while it appears here as a Greek invention made many centuries earlier. With the model from this Samothracian tomb we are able for the first time to see what such a ball was like. It shows clearly that the cover of the ball was composed of polygonal sections, probably of leather, and sewn together. On one seam of the sections the model shows a raised ridge flanked on each side by a row of black dots. These certainly represent the opening through which the inflatable bladder was inserted into the cover and the lacing holes used in fastening it closed. In fact, the model shows a ball exactly like a modern soccer or basketball.

AMERICAN SCHOOL OF CLASSICAL STUDIES
ATHENS



BOOK REVIEWS

THE BEGINNINGS OF CHINESE CIVILIZATION: THREE LECTURES ILLUSTRATED WITH FINDS AT ANYANG, by Li Chi. Pp. xvii + 59, plates 50, map, figures. Seattle, University of Washington Press, 1957. \$6.50.

In the last few years those of us who are interested in Chinese archaeology, but who are unable to read Chinese, have been rewarded by several publications in English by Dr. Li Chi, and other Chinese archaeologists in Formosa. Several papers were given in English at the joint meeting of the Eighth Pacific Science Congress and the Fourth Far-Eastern Prehistory Congress in Manila in 1953. Since that time a few English summaries of Chinese articles have appeared in the Bulletin of the Department of Archaeology and Anthropology of the National Taiwan University. Except for the translation by Kenneth Starr of the volume on *Chieng-tzu-yai* edited by Li Chi, these articles have been of a summary nature. This latest book by Li Chi is of this type, portions being taken from his previous monographs in Chinese, with some new material added.

The Beginnings of Chinese Civilization consists of three Walker-Ames lectures sponsored by the University of Washington Far Eastern and Russian Institute in cooperation with the Seattle Art Museum. It is a popular and very brief summary of the late prehistoric, the protohistoric and early historic periods of Chinese existence, emphasizing the subjects with which Li Chi has been most closely associated. He is disappointingly brief in his discussion of the Neolithic cultures of Yangshao and Lungshan but deals much more fully with the Bronze Age of Shang and Chou.

The first chapter covers the whole of Chinese prehistory in sixteen pages. After a brief discussion of the possible sources of the Chinese population comes the equally brief coverage of the Neolithic. The Lungshan and Yangshao pottery is mentioned and their stratification given as follows: "In the stratified area of the Hou-kang site, three types of relations of the three different types of cultures were observed: the superposition is either the Shang over the Yangshao, or the Shang over the Lungshan, or, thirdly, the Lungshan over the Yangshao. These orders have been found to exist wherever intact stratified cultural remains have been located. The reverse of such orders was not reported in any of the excavated areas within this region. So the sequence thus determined may be given as: the Painted Pottery culture as the earliest, followed by the Black Pottery culture, and then the historical Shang culture" (pp. 14-15). Following this paragraph is the only statement which mentions any other possibility. He says, "But it must be made clear at once: this established sequence has its geographical limitation." This is the extent of the information on the relationship between the Yangshao and Lungshan cul-

tures. No mention is made that the stone and bone artifacts of the two are almost identical, as is the common coarse mat-and-cord-marked household pottery of the two. However, as Li Chi does not consider either of these two cultures as ancestral to the Shang Dynasty, the beginning of Chinese civilization, they are really not directly within the realm of his subject and we should not be critical of this non-subject matter.

Moving on into the Shang dynasty we come to the core of the book. Here, Li Chi is at his best. Li Chi was the director of the excavations at Anyang, one of the capitals of the Shang dynasty, and he has been working at the site or with the collections since 1928, when the excavations were begun. First, he concentrated on the ceramics, then, the stone and bone, and most recently, the bronzes.

Li Chi feels that the Shang culture did not develop directly out of the Lungshan culture. To document this he lists six groups of cultural traits that appear abruptly on the scene with the coming of the Shang (p. 15). The two most important of these groups are the well-developed use of bronze and a highly developed writing system. Examination of various elements of the culture shows connections with the west and other eastern cultures, but close similarity to none. Summing up, he states, ". . . my thesis is that the culture of the Shang dynasty is a very composite affair and represents a fusion of many cultural streams. The fundamental stratum upon which the Shang culture was built is rooted deep in the prehistorical past; the development of the rice culture and the whole complex attached to it illustrates the fact that the economic basis of the Shang Empire is typically Eastern Asiatic and developed *in situ*. . . . The Shang people might have been the earliest Chinese to make extensive use of chariots both for hunting and for war purposes, although it is as yet impossible to prove that the Shang People were the first to introduce metals. . . . The basic problem concerning the genesis of the Shang culture has to do with the still undiscovered pre-Shang phases of the evolution of the Chinese scripts" (pp. 37-38).

Li Chi's third lecture goes into considerable detail on the bronzes excavated primarily at Anyang. He presents sections on their stratigraphy, the chemical analysis of the bronze, bronze molds, and the shapes, in the latter section going into the evolution of the *ko*. No conclusions are arrived at, other than that "There are many key areas equally important for archaeological purposes but totally unknown. Until these areas have been examined with scientific care, it would be rash indeed to postulate a definite theory about the origin of the Chinese Bronze Age" (p. 59).

Were this the end of the book it would be grossly overpriced. However, the plates make up the difference. For a Sinologist the text would probably have points of interest, but the plates would be their focal point. The first twenty plates illustrate the text. Following this are a group of thirty supplementary plates of bronzes and

stone carvings. Many of the plates illustrate previously unpublished specimens. On the whole, the plates are well reproduced and large enough to make out the details.

It is to be hoped that these summary beginnings may be followed by publications with the detailed data; in translation, or with English summary, as has already been started.

WILHELM G. SOLHEIM, II

THE UNIVERSITY OF ARIZONA

THE PERSONALITY OF INDIA, by *B. Subbarao*. M.S.

University Archaeology Series No. 3. Faculty of Arts, Maharaja Sayajirao University of Baroda. Pp. 76, plates, maps, charts, tables. Baroda, 1956.

It is a pleasant task, indeed, to review the present work, which in the opinion of this writer is the best interpretive summary of the archaeology of India that has been published to date. Not only does the author give a descriptive analysis of the various regional archaeological sequences of the Indian subcontinent, but also he attempts to present the evidence in terms of its environmental and geographic settings. Moreover, Subbarao has included in his discussion sections dealing with the theoretical framework of methodology, terminology and chronology, on which current research in India is based. Many criticisms can no doubt be voiced against the author's assumptions and interpretations. This lies in the very nature of a broad study such as this one, particularly if it represents the first serious attempt of its kind. If, therefore, in the following discussion this reviewer criticizes some of the concepts expressed by the author, this should in no sense detract attention from the fundamental importance of Subbarao's work which is, without a doubt, a most valuable attempt at synthesizing the archaeology of India, an attempt that has been long overdue.

Following four sections dealing with the fundamental problems of Indian archaeological research, the main body of material is presented under three major headings. The section entitled *Prehistory* covers the Stone Age, including the Neolithic period. It is perhaps the weakest part of Subbarao's study. This is largely due to the inadequacy of our knowledge of the relative chronology and regional interrelationships of the Stone Age industries of India. The least controversial phase, here, is that summarized under the sub-heading of *Early Stone Age*, which includes a discussion of all the Early Palaeolithic assemblages of India. The sub-section dealing with the *Middle Stone Age* is not a very fortunate one. On the basis of present knowledge the validity of the concept expressed by this title may be doubted. Though the so-called Middle Stone Age industries are probably chronologically somewhat older than the Microlithic industries of the Late Stone Age, and certainly very much younger than the Early Palaeolithic assemblages, the stratigraphic evidence is in no case satisfactory enough to fit them into a chrono-

logical scheme. To call them, in imitation of South African usage, Middle Stone Age industries merely because they are apparently older than, and typologically different from the Microlithic industries, is not sufficient to assign them a terminological/chronological niche of their own. Typologically, these industries are described as "... blade, scraper and burii (sic) industries with distinct 'Levallois' and 'Mousterian' technique" (p. 14). This certainly does not simplify the task of classifying them. At Sanganakallu near Bellary this kind of assemblage was found in association with microliths (classified by Subbarao as Late Stone Age). On the whole the so-called Middle Palaeolithic industries appear to be quite late. Therefore Subbarao's classification seems somewhat premature and not entirely based on objective criteria.

The sub-section dealing with what the author calls the *Later Stone Ages* is introduced by the following statement: "This term has been deliberately used to include what we have called 'Late Stone Age' and 'Neolithic'" (p. 30). This does not, on any account, seem permissible. The lumping together of the non-agricultural Late Stone Age assemblages and the agricultural Neolithic complexes is by definition methodologically poor. It is a firmly established custom to separate the Neolithic from other Stone Age assemblages on the basis of the different economies involved. It would have been more satisfactory, less confusing, and methodologically sounder had the author followed the standard subdivisions of prehistoric periods which, without a doubt, apply to India as much as to the areas for which they had originally been devised. Subbarao's *Late Stone Age* is essentially but not exclusively characterized by numerous stone tool assemblages containing geometric microliths. Some of these are associated with pottery. The latest of these assemblages appear to date from just prior to 400 A.D., but their lower date limit has not as yet been established. The Sanganakallu evidence certainly suggests some kind of a continuity between the industries the author calls Middle Stone Age and Late Stone Age. Subbarao defines his *Neolithic* phase of the Stone Age as a combination of agriculturalism, pastoralism and the use of polished stone axes (p. 14). Since the first appearance of metals signals to the author the emergence of a new phase which he calls Proto-historic, the distribution of his Neolithic communities remains rather spotty and somewhat ill-defined. Basically, the presence of polished stone axes and the absence of metals are the defining factors of Subbarao's Neolithic phase. The adequacy of this definition remains to be demonstrated.

The ensuing section of this book deals with the *Proto-historic* and *Early Historic* periods. The author bases his analysis of these periods on a geographical division of regional sequences into Areas of Attraction and Areas of Relative Isolation. These concepts appear to be very useful for explaining the differential development of cultural manifestations in various parts of India. The Areas of Attraction include the Indus Basin, the Gangetic Basin, Bengal, The Malwa Plateau, Maharashtra, the Andhra-Karnatak region, and Tamil-

nad. The Areas of Relative Isolation "away from the main transcontinental communication systems" (p. 56), comprise the Lower Indus Valley, Rajputana, the Western Littoral, Gujarat, Assam, Orissa, and Kerala. According to the author the isolation of most of these areas was "broken during the early historic period by the development of a vast network of communications, and the consequent expansion and colonization of large scale agricultural communities under politically stable and economically prosperous conditions" (p. 63).

The author defines his Proto-historic period as follows: ". . . after these four phases of the stone age, we naturally have transitional communities who were acquainted with metals, but not yet sufficiently to alter the economic character of their societies and stone supplies a major portion of their raw materials for tools and weapons. These may be called 'chalcolithic' for convenience. We have as yet not sufficient evidence about the Proto-historic period and technologically, the alluvial plains of the Upper Indus and Western portion of the Gangetic basin were distinctly in the Copper and Bronze Age. But the rest of the Peninsula was in a Chalcolithic age. Hence to avoid this chronological and technological complications (sic) we can adopt the term Proto-historic period, to cover the whole group till we come to the next period" (p. 14).

This lengthy quotation serves to emphasize the confusion in the author's mind as to the question of culture-stage classification for the Indian evidence. Time and space permit this reviewer to consider only the greater Indus sequence. Subbarao includes in his Proto-historic phase all the small village communities, most of which antedate the Harappa civilization. The majority of these manifestations would be placed in the Neolithic on the basis of the generally accepted system of classification. Admittedly it is difficult—as most Middle Eastern archaeologists know—to distinguish the point at which such village communities emerge into the stage of "High Civilization," the stage which is characterized by complex socio-economic interrelationships and by relatively uniform political control from town-centers of a series of smaller communities, and which, in the absence of historical records, may be called Proto-historic. Yet the author should at least have made an attempt to define the basic differences in this classic area of early Indian civilization. Such a definition would also have helped us to understand the development of the culture sequences in other less adequately explored regions of India.

The dividing line between the Proto-historic and Historic periods is ill-defined. Broadly speaking, the latter begins when archaeological evidence can be supplemented by historical (i.e. literary and epigraphic) data. Since the Indus script has withstood all attempts at deciphering, and since no sources of later times shed any significant light on the nature of the Harappa civilization, the latter may for the time being validly be labeled Proto-historic. Historical evidence begins to appear toward the middle of the first millennium B.C. Hence, the beginning of the historical period can be fixed in certain areas of India at about 500 B.C. Such a

definition, of course, implies the necessity for each archaeological phase to be tied in with historical evidence. Whilst in some areas in India such correlations are well established and therefore valid, this reviewer does not understand on what objective grounds Subbarao classifies such phases as the Megalithic of the Deccan (fig. 27) and other archaeological complexes characterized by Black-on-Red pottery (figs. 28, 29) with the Historic period. Surely we are as yet neither in a position to identify the peoples who were responsible for these manifestations, nor to give them a historical background derived from literary or epigraphic sources. The occasional occurrence of Roman antiquities can at best be used for establishing the chronological position of these complexes.

In the next section of his monograph, entitled *Areas of Isolation—Tribal India*, Subbarao attempts to point out the cultural continuity up to the ethnographic present, characteristic of certain "areas which have become the blind-alleys of civilization in India" (p. 64). The author defines these areas as isolated regions where "people have managed to survive in a perfect ecological equilibrium in small communities with the simple life suited to their technological attainments" (p. 65).

In the final section of this book the author draws the conclusions of his analysis. He finds that the overall pattern of cultural development in India closely follows the geographic and physiographic divisions of the subcontinent. In post-Palaeolithic times the Indus Basin was the first region to develop an urban civilization under the impact of Western Asian influences. Towards the end of the Indus period, the influx of new populations led to an explosive expansion into the second great river system, the Gangetic Basin. During this period the Malwa Plateau emerges as a passageway for the colonization of the Deccan by metal-using peoples. This in turn led to a rapid spread of the new way of life, accompanied by the infiltration of small groups of peoples into South India. The nature of this infiltration is attested by literary evidence. Subbarao concludes that by "about the 4th century B.C. the whole country begins to display a degree of homogeneity coupled with a pleasant diversity" (p. 68). He places great emphasis on India's communication systems which reached a zenith in the development of great transcontinental highways in Mauryan times. Finally the author points out a series of major problems in Indian archaeology that await solution. In the first place, a number of regional sequences are as yet poorly interrelated. Many areas of India are only very imperfectly explored, and general knowledge of the prehistoric sequence of India is still tantalizingly vague.

The work reviewed here represents a very valuable addition to the archaeological literature of India. In spite of many shortcomings, it is a splendid, comprehensive and thought-provoking summary of the present state of Indian archaeological research. The book is lavishly illustrated with numerous synoptic charts, maps and plates. In view of the all-embracing nature

of this study a more exhaustive bibliography would have been highly desirable.

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TELL BASTA, by *Labib Habachi*. Supplément aux Annales du Service des Antiquités de l'Égypte, Cahier no. 22. Pp. xvi + 144, pls. 43, figs. 35 + 4 maps and plans. Imprimerie de l'Institut Français d'Archéologie Orientale (sous séquestre), Cairo, 1957.

Mr. Habachi, a Chief Inspector in the Egyptian Department of Antiquities, here publishes the results of three seasons of excavations which he directed during 1939, 1943 and 1944 in the temple area of Bubastis. The manuscript was completed about ten years ago, but the author has since been able to incorporate a description of a chapel dating to Amenophis III, accidentally uncovered in 1948 during the construction of a hospital for the Zagazig municipality. He has also added a number of references to publications that have appeared within the last decade.

Five of a total of ten months of excavation were devoted to an objective of unique importance, the investigation and clearance of an Old Kingdom temple built by Pepy I. This temple proved to consist of an extensive brick enclosure wall with an entrance at the south end lined and roofed with limestone, and, toward the north end of the temenos, a relatively small sanctuary facing east, also mainly of brick, but equipped with limestone pillars and portal elements. Most of the wall, and notably its limestone entrance, was well preserved, in some places standing to a height of three meters; only on the east side were parts of it altogether destroyed, so that it cannot be said with certainty whether there was more immediate access to the sanctuary than the southern entrance provided. The walls of the sanctuary were reduced to a much lesser height, but enough remained to afford a virtually complete plan. The recovery of so extensive and so well preserved an architectural complex of Old Kingdom date would be remarkable at any site in Egypt; that it should have been recovered from the proverbially unpromising soil of the Delta may well encourage further excavation of the neglected sites of the north. Similar good fortune may not soon be repeated, but the Delta's potentialities for the earlier periods (specifically in Sharqiya Province) have also been demonstrated in recent years by the discovery of a Middle Kingdom temple at Tell Dab'a, excavated by Shehata Adam for the Department of Antiquities, and by repeated random finds at various protodynastic sites.¹

It is characteristic of Mr. Habachi that, given the opportunity which the discovery of the Pepy temple provided to dig at Tell Basta, he subjected the entire site and its environs to as much investigation as time

and funds permitted, reconsidering the main temple area where Naville had worked half a century earlier, as well as seeking out entirely new data. By far the greater part of the publication is taken up with the finds and observations that accrued from this half of the term of excavation. In reconsidering Naville's work Mr. Habachi's principal results are: (1) The identification of the "Gateway with Colonnade" north of the main temple area as a small subordinate temple built by Osorkon II and dedicated to Miros (*M3-hs3*), the son of the local goddess Bastet; (2) a further argument for dating the finely sculptured columns of the "Hypostyle Hall" to the Middle Kingdom; (3) a review of various indications that the "Hall of Nekhthorheb" (Nectanebos II) was not simply a hall, but was the sanctuary of the temple; (4) the grouping of seven shrines of Nectanebos II, all presumed to have been placed in this sanctuary. For the layout of the parts of the temple named here, the reader must still refer to the sketchy plan in Naville, *Bubastis*, pl. 54 (which might conveniently have been repeated in the new publication).

About 200 meters north of the main temple ruins Mr. Habachi excavated the tomb of a Twentieth Dynasty viceroy of Kush named Hori, the son of another individual of the same name and rank whose tomb had previously been found nearby; it is pointed out that further tombs are evidently to be expected in this area. At an equal distance west of the main temple the aforementioned chapel of Amenophis III was cleared; one of the finds made here is a fine steatite statuette representing an official of this king, and his wife. Statues were also found in investigating the perimeter of the temple, one of them a "dyad of the same type as the Hyksos sphinxes" which is to be published later together with "some fragments of frescoes" (p. 93). In an earlier communiqué of the Department of Antiquities in *Chronique d'Égypte*, nos. 39-40 (1945) 85, the dyad is apparently the same piece of sculpture there described as "un sphinx à tête de roi; la crinière léonine couvre le cou et les épaules et encadre la tête royale, rappelant beaucoup les sphinx soi-disant Hyksos. . ." In the same place the fragments of frescoes are described as "fayence polychrome."

Apart from the site of Tell Basta itself, Mr. Habachi's attention has been drawn to the various inscriptions which are to be found at nearby places, especially Bilbeis, 20 km. southward. In reviewing the Bilbeis material, some of it previously unknown, he shows that it most probably derives from the Tell Basta ruins, and thereby arrives at the further conclusion that Bilbeis was not founded until the Roman Period.

Of the several discussions of cults and places, those dealing with the Bilbeis question are particularly good; here, as elsewhere in the book, Mr. Habachi shows his extensive knowledge of the Delta sites and their history. In this connection it may be noted that he has already contributed extensive and valuable discussions of two other sites in the eastern Delta, situated to the

¹ A few of these finds will be published in a forthcoming issue of *Artibus Asiae*.

northeast and northwest of Tell Basta, respectively, the first being Khata'na—Qantir (*ASAE* 52, 443-562) and the second Tell en-Naqs—Tell ez-Zereiki (*ASAE* 53, 441-480).

The relatively brief treatment of the Old Kingdom material in the first chapters invites further comment on some points. The representation of Bastet on the exterior lintel of the enclosure wall does not seem cat-headed (p. 14; cf. p. 117) but lion-headed, as in a Fifth Dynasty relief where she is identified with Sakhmet (Borchardt, *Grabd. Königs Ne-user-re'*, fig. 72), or a Twelfth Dynasty relief where she is "Mistress of Ashru" (Petrie, *Coptos*, pl. 10). Her headdress has the outline of the crown of Upper Egypt, but in examining this on the original relief in Cairo I noticed a wavy band across it, defined by two incised lines, as follows:²



In the figure of Iunmutef, farther to the right, a beard is clearly visible and probably the sidelock is also to be recognized.

As Mr. Habachi has pointed out, the presence of the Denderite Hathor behind Pepy is doubtless to be explained by the special interest he took in this goddess and her cult; for the texts in the Dendera temple which are quoted in this connection, see now F. Daumas in *BIFAO* 52, 166ff. It should also be pointed out that priests and priestesses of the Denderite cult are known from several places other than Dendera during the Old Kingdom and the First Intermediate Period (*JAOS* 76, 106), so that it may be considered whether Pepy caused the Hathor of that locality to be worshipped at Bubastis as well.

Within the temple of Pepy I, as on the entrance lintel, Hathor was probably featured almost as prominently as Bastet, for her distinctive sundisk and horns, neither of which had yet been borrowed from her by other goddesses, seem to appear on a block from the sanctuary (pl. 4B, fig. 5); in any case, the divinity in question can hardly be Bastet, as is suggested (p. 22), for the curve of the disk is apparently certain.

On the interior lintel of the temenos entrance, the temple is identified as "the ka-house of Pepy in Bubastis." The author considers the special, subordinate character which the term "ka-house" implies, but the temple's great size persuades him that it was not a

subordinate structure, that it was, in fact, the principal temple at Bubastis in its day, and that it was the first to be built there (pp. 39-41). I doubt that the consideration of size can be decisive in settling this question; furthermore it is the extent of the temenos that gives the impression of immenseness rather than the sanctuary itself, which measures a fairly modest 15.5 x 16.5 meters. And there are at least three other considerations which argue strongly for the opposite conclusion.

In the first place, Pepy I and his immediate successor are known to have built ka-houses at a number of local cult centers throughout Egypt. Besides the single case which is cited, that of Zawiyet el Amwat, a ka-house belonging to one of the two Pepys—perhaps in all cases Pepy I—is mentioned in titles at Akhmim ("the ka-house of Pepy which is in Akhmim" *Urk.* I, 264, 14) and at Asiu (coffin of *Nb-htp* in the British Museum: *A Handbook to the Eg. Mummies and Coffins*, pp. 23-24). A ka-house of Merenre is similarly mentioned on two unpublished stelae from Abydos (Cairo Cat. 1615 and another in University College, London) and one belonging to Pepy I is known from a Saqqara false door (Lauer, *ASAE* 53, p. 158 and pl. 7); this last is perhaps to be attributed to the temple area of Memphis rather than to the king's pyramid complex. Pepy I also ordered his royal builder Nekhebu "to direct the building of the ka-houses of His Majesty in Lower Egypt," throughout the length of the Delta (Dunham, *JEA* 24, pls. 1 (1) and 2, first two cols.). And for his mother, whose tomb lay beside his father's at Saqqara (Drioton-Vandier, *L'Egypte*, 3rd ed., 232), he probably built "the ka-house of the king's mother Iput (in) Coptos, the Coptite nome," which is the subject of a decree bearing his name (*Urk.* I, 214). Most important of all, the El Kab graffiti name "the ka-house of Meryre (Pepy I) which is in the *Pr-wr*" (*LD* II, 117, and cf. 1). Here Pepy's temple is expressly said to be within the precincts of the temple of Nekhbet, the local goddess, and it does not seem likely that the situation of the ka-houses was much different at the other sites. All of the ka-houses mentioned here, excepting the Nekhebu reference, are known from the title of Inspectors of Priests (*shd hm.w-ntr*), indicating that they had their own priesthood to call for an Overseer (*imy-r hm.w ntr*).

A second consideration is the probability that the hood, while this personnel may not have been large later stages of the Bubastite temple would have included, or would have been built upon, the ground that the oldest temple had sanctified; to phrase the same thing differently, the excavator's pertinent query as to why so much of Pepy's structure remained intact is in part answered by the likelihood that the structure was built outside a previously existent temenos, and so escaped obliteration by the following two millennia of rebuilding and addition. The blocks of Cheops and Chephren which Naville found at the east end of the main temple area might have been brought from another site, as the author points out (p. 40), but may equally well have belonged to a local temple of the

²I wish to express my thanks to Gamal Salem, of the Cairo Museum's curatorial staff, for his help in drawing this detail.

Fourth Dynasty, and Pepy I, whose name appears on other fragments in the same area, perhaps restored the earlier temple at the same time that he built his ka-house further westward.

Finally, this likelihood would also explain the orientation of the scenes and inscriptions on the lintels of the temenos entrance. On the exterior lintel the king faces to the spectator's right, toward Bastet, whereas if the sanctuary beyond the entrance were really the main temple of this goddess, we might expect the reverse arrangement. For in this case the goddess should face right, as the chief figure in an isolated, non-symmetrical scene normally does—the more so as she would also be conceived as proceeding eastward from her dwelling, while the king would face westward as though entering into her presence. The inscription on the interior lintel similarly reverses the expected orientation; the signs face left instead of right, as they normally do in any non-symmetrical inscription unless some external factor causes them to be turned about. An external factor of this kind does indeed seem to have existed, namely the presence of another temple, the main temple of Bastet. If we assume that the latter stood to the east of Pepy's ka-house, within the main temple area of later times, as has already seemed most likely, then both the figure of the king and the inscription naming him and his building would understandably be turned toward this main temple, with Bastet oriented as though she were appearing from that quarter. It is admittedly risky to be too absolute about what is or is not "normal"—a less easily explained case of unusual orientation within the sanctuary will be mentioned below—but, taken with the other indications, the last point seems to establish the subordinate character of Pepy's ka-house at Bubastis almost beyond question.

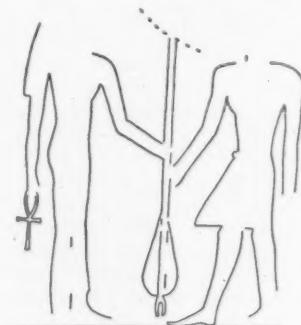
There is reason to believe that, in cases when the term refers to a specific building, the "ka-house" is typically a repository for statues of its owner; it is the serdab in a tomb, and the naos in a tomb or temple. (See Junker, *Giza* III, 118-122; also *ibid.* VI, p. 10, n. 1 on right, where some evidence is presented for the practice of placing royal statues in various temples in relatively early times.) One might suppose, then, that statues of the king were set up in the Bubastite ka-house, and although the precise nature and location of the statues cannot be established with certainty, a fair approximation can be made. In its terminal end, Pepy's sanctuary closely resembles the larger sanctuary discovered by Fakhry just off the causeway of the bent pyramid at Dahshur (Ricke, *ASAE* 52, 611 and 616), which has two transverse rows of five pillars each, instead of four each, six niches in the back wall (instead of five) similarly corresponding to the spaces formed by the pillars. As Ricke indicates in his fig. 5, the niches of the Dahshur sanctuary apparently contained engaged statues of the king, and the same arrangement is probably to be assumed at Bubastis. A parallel may also be seen in the series of five statue niches which is a standard feature of pyramid temples. If the Bubastite temple is thus understood to be focused upon the person of the king, the orientation of the

reliefs and inscriptions over the temenos entrance seems particularly appropriate.

The example of the Dahshur temple may also be used to bring out another point. On either side of its interior, leading up to the statues of the king, is a procession of personified estates which represents the bringing in of harvests and livestock from the various nomes to serve the royal funerary cult. The bringing of supplies to statues in the central funerary temple of kings was supplemented by the reverse of this procedure: the statues of kings were brought into the local temples (or their precincts) throughout the country so as to secure for them a share in the offerings made to the local gods. A second function of the reliefs of the Dahshur temple and other temples belonging to the pyramids was likewise served by the extension of the royal cult to the provinces: the king's association with the local gods was more effectively realized and perpetuated thereby. With the increase of decentralization which characterizes the late Old Kingdom, increasing emphasis was evidently placed on the provincial aspect of the royal cult. It is in this light that we must regard the sizeable ka-house of Pepy I at Bubastis, and the number of similar temples built at other places by the same king.

If the temple of Pepy I at Bubastis belongs to a very special category, this is not to say that its simple plan is radically different from those of early temples in general. Thus the non-funerary temple of Medinet Madi, dating to the Twelfth Dynasty, is also similar, although even more simply laid out. It provides the closest parallel for the facade of Pepy's sanctuary, assuming that the latter had two pillars which supported the roof of a portico, as the plan would indicate. In his description, however, the author states that the entrance possessed "recesses into which limestone jambs were set but only the bases of the jambs remained" (p. 18). Since no jambs set into recesses are indicated on the plan, it would seem that the jambs and apparent pillars are one and the same, but no comment is made on this discrepancy and the reader is therefore left in doubt.

One of the pillars within the sanctuary bears an interesting group of figures in sunk relief; no drawing is given, but as nearly as I can judge from the photograph in pl. 6B, it has this appearance:



According to the author, the king and a goddess, whose head could be recognized as that of Bastet, are engaged in performing the ceremony *pd.t* if "stretching the cord." If this explanation is accepted, it must be admitted that there are several departures from the traditional presentation, as it is known from the Second Dynasty onward. Customarily two long stakes, a loop of cord stretched between them, are held upright on the ground by the king and the goddess Seshat respectively, each of whom pounds in the stake with a club held in his other hand. Here we should have to assume that the stakes are held together, so that the loop of cord falls loosely downward. But even on this rather improbable assumption, the stakes would be too long to serve their purpose. It is much more likely that a single fork-bottomed staff is involved, belonging to the goddess alone, and the looplike shape therefore seems to be a quite separate object which the king holds—perhaps a bag or necklace or possibly an oar.

The orientation of the inscriptions on the pillars, which repeat the names of Pepy I, could only be determined to a limited extent, but it is interesting that the direction of signs on the front and back of the southwesternmost pillar and on the back of the pillar next to the northwesternmost one (nos. 4 and 2, p. 25) is uniformly turned southward, assuming that → in the description of pillar 4 means "signs face right," as on p. 18. One might rather have expected a symmetrical scheme of orientation on these transverse surfaces left and right of the axis.

It may be added that the reader is not told, in cases where isolated blocks have decoration preserved on more than one side, precisely how the decorated sides are related to each other. The relation between figs. 4 and 5 can be seen clearly enough, but not so the relation between figs. 8-9-10 and 11-12. One may deduce that the bottom of fig. 19 is adjacent to the bottom right of fig. 18, and from the direction of the inscription on fig. 19 the reliefs in fig. 18 may then be identified with certainty as belonging to an exterior architrave. Doubtless the author reached the same conclusion, but he has left the reader to work it out for himself.

The other architrave of Nectanebos II (fig. 17A) is presented in greater detail than it was in Naville's *Bubastis* (pl. 44, A), and it is now easier to recognize the resemblance between its armed sun disk and an earlier occurrence of the same device which has been taken as a precursor of the many-armed disk of the Aton (Selim Hassan, *ASAE* 38, 53ff).

The graphic presentation of the material published by Mr. Habachi is comprehensive and clear. A hand-copy might have been helpful in supplementing one or two of the texts on statues, but most of the more important reliefs and inscriptions are reproduced both in drawing and photograph. The translations, without commentary, which are given for all inscriptions show considerable care, as does the text in general. There are comparatively few errata worth mentioning. On p. 56 *wrt hs.t* has inadvertently been read for *wr.t hs.t*, and in the translation of 'h' nfr on p. 105 one wonders

if "good serpent" was not meant rather than "good servant." Fig. 14C, and not 14B, represents the piece which is the same as Naville, *Bubastis*, pl. 41(G). On p. 61, the first line of the second paragraph, read "west" for "east," and on p. 89, fourth line, transpose "western Delta" and "eastern Delta."

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DIE ZEICHNERISCHE REKONSTRUKTION DES FRAUENFRIESES IM BÖÖTISCHEN THEBEN, by Helga Reusch (Abhandlungen der deutschen Akademie der Wissenschaften zu Berlin, Klasse für Sprachen, Literatur, und Kunst, 1955. 1). Pp. vii + 76, figs. 21, pls. 15. Akademie-Verlag, Berlin. DM 25.

In his 1909 report on the excavations in Thebes, Keramopoulos included a brief discussion of fresco fragments found in the palace (*ArchEph* 1909, goff) with colored illustrations of some twenty-one fragments. In a later report (*Deltion* 1917, fig. 193) Keramopoulos published Gilliéron's drawing of one composite figure reconstructed from the fragments. Now Fräulein Reusch adds twenty-nine unpublished pieces of the "Procession of Women" and elaborates a reconstruction of several figures. The monograph is dedicated to Rodenwaldt and to his proposition that the Theban fresco, "once it has been reconstructed, can fill a great gap in the history of early painting and provide a welcome object of comparison for the later, clumsier and much less important Procession of Women from Tiryns." A foreword explains that since the actual fragments are still inaccessible and some may have been lost in the war it seemed best to publish the tracings made by Rodenwaldt soon after the original excavation and base the reconstruction on them.

The first chapter is a brief account, based on Keramopoulos' excavation reports, of the Theban palace and, in particular, of the room in which the fresco fragments were found. The second chapter begins with a full catalogue of the forty-two fragments which Fräulein Reusch has assigned to the Procession of Women. Some of the fragments illustrated by Keramopoulos are joined to new fragments, but five of them are not used for this reconstruction. All but two of the new pieces and all of the new combinations are illustrated in color. The second chapter continues with a closely-reasoned assignment of the fragments to various figures, with line-drawings to show the necessary locations. For example, the position of both arms evident on one fragment makes impossible the particular combination of gifts carried by Gilliéron's reconstructed figure. In this way, mutually exclusive motifs require that the fragments be assigned to at least nine different figures. A large folding plate with seven figures in line-drawing illustrates the evidence for zones of background color. A second folding plate

shows five representative figures in color, identical as to heads and skirts but differentiated, as the fragments require, in stance, color of bodice, sleeve-trim and gifts carried.

The third chapter examines the frieze as a whole, especially in relation to the size, shape and construction of the room which it decorated. Since not all, but a majority, of the figures walk to the right, Fräulein Reusch assumes on the N wall an off-center objective toward which they proceed in two directions from the entrance door in the E wall. Some suggestion of the objective may be gathered from fragments which seem to portray wall-hangings and a piece of furniture.

The fourth chapter takes up the dating of the fresco both stylistically and on the basis of evidence from the excavation. The frieze of women was replaced not many years before the destruction of the palace about 1400 B.C. Fräulein Reusch dates the painting of the fresco a little before 1500 B.C. and slightly earlier than the fresco in the Corridor of the Procession at Knossos, since some of the new fragments invalidate the grounds on which Evans considered the Cretan procession earlier. She goes on to suggest that the procession-motif may have been imported to Crete from the mainland. In the fifth chapter detailed consideration is given to styles of hair-dressing and clothing in Minoan and Mycenaean painting with reference to Cretan influences, changes in fashion and the differences between sacred and secular use.

Fräulein Reusch is to be congratulated on her meticulous and productive handling of the new evidence. It is to be regretted that she could not work with the fragments themselves.

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GESCHICHTE DER GRIECHISCHEN KUNST I: DIE GEOMETRISCHE UND DIE FRÜHARCHAISCHE FORM, by Friedrich Matz. Textband pp. xii + 538, Tafelband pp. xxii, pls. 297, figs. 34. Vittorio Klostermann, Frankfurt am Main, 1950. DM 60.

The work discussed here is the first installment of a history of Greek art in five (double) volumes. It consists of a bulky volume of text accompanied by a handy book of plates, making a sensible physical separation of parts to be consulted in uneven tempo and frequency. The book is important enough to warrant a notice at this late date.

As is explained by Matz in a preliminary section, this handbook is of an unorthodox variety. What archaeologists need in the first place (and have been trying to produce with mixed success) is a factual description and a historical account of the preserved works of ancient art and their reconstructible counterparts. An ideal handbook of this kind would have objective validity and usefulness; although even the artistic and historical analysis required from its author

would imply an amount of interpretation and prevent him from becoming a mere cataloguer.

Admitting the need of such a general handbook, Matz here ventures to offer a book which takes strict history and description more or less for granted. He tries to penetrate beyond the descriptive level and makes it his task to analyze the psychological and even physical human ingredients which go into the making of specific art forms. His method—here as in previous writings—is that of the "Strukturforschung," a philosophical analysis of form and spatial relations in works of art.

It is difficult to give a strict definition of the method and its aims. Matz refers the reader to practical examples and to theoretical considerations of Strukturforschung in publications by colleagues. The list is given on pp. 9-11. It seems clear that the school of Strukturforscher is a German phenomenon. Most of its writing is so firmly embedded in the German idiom as to defy translation. Even if a literal translation can be effected, the magic of thought seems lost in the process. Should one consider this approach to art as typical of the Form-Struktur of the German mind?

The latter observation merely tends to acknowledge the fact that the interpretative approach to ancient art, the attempt to create and recreate the world of conscious and unconscious motivations, ideas and impulses of ancient artists varies not only from generation to generation but from country to country. The urge to understand more than the surface and tangible forms, the need of penetration beyond description and visual analysis is universally admitted; but in the realm of artistic imponderabilia the rules of intellectual behavior have not been codified by general agreement. In view of this lack of prescribed orientation, any approach has a right to be proclaimed and examined.

The Strukturforschung which studies the "innerer Zusammenhang" of works of art is not pure philosophy. It analyzes interrelations which make up this inner "coherence" and it searches for them while oscillating between observation and abstraction (13ff). The relative dose of the two differs in the present handbook from case to case, but as a rule abstraction runs for long pages trying to establish the manifestation of the *Formgesetz*.

The exercise is concerned with Greek art of the period of c. 750 into the second quarter of the sixth century B.C.; covering the entire orientalizing phase with extensions back into late geometric and down into early archaic. Ancient art is taken in its widest meaning, even including minor arts of somewhat functional nature (e.g. tripods, fibulae, helmets). So long as one stays with the text, one should look for the philosophical experiment and read the book as such. The author asks that the method be judged by application. This reviewer is bound to comment that the demonstration emphasizes the lack of universality in the methods of Strukturforschung and the difficulty of it. Even the protagonists of this approach seem to struggle with the formulation and clarification of their tenets, in which process too many pages are filled with non-essen-

tials. The need of a *deus ex machina* to give the philosophy of Greek art some external and physical hold is expressed in the frequent recourse to anthropological (not to say racial) notions.

Matz here as elsewhere is led to believe in racial connections on the basis of presumed artistic affinities, e.g. between Minoans and "vorindogermanische Bandkeramiker," p. 37. One finds the terms "blutbedingt, blutmässige Bedingtheit," frequently applied to art forms (p. 52: "im Bereich der Formensyntax vertritt diese tektonische Konstante das indogermanisch Griechische"), reducing artistic complexities to racial complexities which the anthropologist would abhor to define. There is another example of complicated formulation on p. 66: "Gefragt werden könnte allerdings, ob dieser Verlauf der Entwicklung vom reifgeometrischen zum späten Stil eine aus der Natur des Geometrischen heraus zu begreifende, von aussen nicht bedingte Zwangsläufigkeit darstellt, ob also die Proklamierung der absoluten Form an sich schon die Gegenkräfte auf den Plan rief, oder ob sich hier wieder die blutmässig bedingten vorgriechischen Formenkräfte regen." The facts alluded to in these and the following sentences could be profitably discussed, the question being whether orientalizing influence is solely responsible for the change in and after late geometric; but few thinkers of other schools would subscribe to "die blutmässig bedingten vorgriechischen Formenkräfte" as latent genes surviving the Dark Ages.

The text contains a good amount of solid and descriptive information inserted among the analytic passages. One will not consult this handbook for factual information, however, as its primary aims are different. In spite of this, the plate volume has a good right to be used even by the disbelievers in Formstruktur. On some 300 plates the most comprehensive available selection is offered the student of orientalizing art. The photographs are generally good, and if the paper is not of top quality the publication date of the book is a sufficient excuse. As a reference work this volume will have many grateful users.

Matz's explanations and point of view will be discussed and compared in future theoretical research on the nature of Greek art. One hopes that the increased exchange in the scholarly world will produce a closer approximation to a cosmopolitan idiom in the study of ancient art, with due regard to the courage and knowledge which made the present experiment possible.

MACHTELD J. MELLINK

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THE ATHENIAN AGORA. VOLUME III. LITERARY AND EPIGRAPHICAL TESTIMONIA, by R. E. WYCHERLEY. Pp. ix + 259, pls. 4. The American School of Classical Studies at Athens, Princeton, N.J., 1957. Cloth, \$10.00.

Herodotus 6.103 was overlooked. Otherwise the *Liter-*

ary and Epigraphical Testimonia concerning the Athenian Agora have been, it seems, thoroughly collected and sensibly arranged by R. E. Wycherley, who had access to advice from Homer Thompson, Eugene Vanderpool and B. D. Meritt and has certainly kept abreast of the latest topographical and epigraphical discoveries. The 731 literary and epigraphical texts in Greek are followed by translation and brief but pertinent commentary. Plans, twenty-three pages of indexes and clear subject headings over the texts render the book easy to use. The technical perfection is striking. Like the other books of this distinguished series volume III has enjoyed superior editing by Lucy Shoe.

The whole series should be in every classical library of any pretension. This volume not only will be indispensable to archeologists who wish to study the excavations, but as a reference work it will prove uncommonly useful to teachers and readers of Attic literature and Athenian history.

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LES ENLÈVEMENTS ET LE RETOUR D'HÉLÈNE, by *Lilly B. Ghali-Kahil* (École française d'Athènes, Travaux et mémoires fasc. 10). Text, pp. 364, figs. 3. Plates, pls. 105. E. de Boccard, Paris, 1955. F. Fr. 7,000.

Abducted by Theseus, Helen was brought back to Sparta by the Dioskouroi; seduced by Paris she returned with Menelaos. This book discusses the two abductions and the second return, the first having been dealt with by Fernand Chapouthier (*Les Dioscures au service d'une déesse* [1935]), who suggested to the author that she study the legend of Helen in its entirety. Following his advice and his example Mme Ghali considers Graeco-Roman culture as a unit. She gives equal attention to art and literature. She does not draw a dividing line between the classic and the Hellenistic periods, or between Greece and Italy. The evolution of the legend of Helen is followed in literature from Homer to the Greek and Latin writers of the imperial period, and in art from Greek vases to Etruscan relief urns and to Roman paintings.

The history of the legend is divided into three big periods. For each of them the texts and the representations are studied successively. These inevitably arbitrary divisions break the evolution of the literary as well as the artistic traditions. The break between lyric poetry and Attic drama is no greater than between the Eretria Painter and the Meidias Painter. This method of presentation has been chosen to bring into focus for each period the reciprocal action of art and literature. The same question can be raised for all mythological subjects. In the case of the story of Helen it is particularly difficult to establish the existence of precise connections between one domain and another. As is natural, at the same moment works of art and literary works bear witness to the same taste, the same

state of mind. But that does not mean that there was an influence of one domain upon the others. New ideas in the world of moral concepts, discussions of the guilt of Helen or the superior rights of beauty, the subtleties of poets and rhetoricians could hardly influence the pictures painted on the vases. Thus the two parts of the book, the one devoted to literature, the other to art, would perhaps have gained by being completely separated.

This review will deal only with the archaeological part. Two hundred and fifty-six monuments are listed and described in detail in the catalogue. The abundance of illustration of good quality helps one to follow the argument. It includes a considerable number of photographs reproduced here for the first time. Besides, a great many other monuments which are more or less directly connected with the subject-matter of the legend of Helen are studied in the notes, the excursions, and the appendices, of which some sample headings will show the diversity and the interest: the Arrival of Paris at Troy; Connections between Helen and the Nemesis at Rhamnous; the Ilioupersis of Polygnotos; the Ilioupersis by the Brygos Painter; Helen on mirrors; the Heroon of Gjölbashi-Trysa; Pelops or Paris?; Ajax and Cassandra.

The grouping of monuments pertaining to a legend brings out by simple statistics what the popularity of this legend was in ancient art, which episodes or which variants enjoyed the greatest success at a given epoch. But in addition it is necessary that the subject be securely identified. From this point of view, Mme Ghali has taken up one of the most difficult legends of Greek mythology. The three principal actors and the secondary characters are strictly human beings whom no attribute distinguishes from their like, unless, occasionally, the costume of Paris. The episodes of the myth are few in number and banal: visit of Paris to Helen; abduction (or rather departure) of Helen; embarkation at Gytheion; meeting of Menelaos and Helen at Troy. Mme Ghali is fully aware of this difficulty. In compiling her catalogue she has given proof of a critical spirit and omitted the monuments of too uncertain an interpretation. In a certain number of cases, however, doubt remains permissible.

The abduction of Helen by Paris consists of three stages, the encounter of the two, the departure from Sparta, and the embarkation at Gytheion.

The encounter of Paris and Helen is only rarely illustrated before the middle of the fifth century B.C. From this time on it enjoyed a certain popularity as a variant of scenes in the gynæcium. How, among these very numerous representations, can we distinguish from simple mortals the heroes and heroines of legend, and, among them, Helen and Paris? By a series of connections Mme Ghali has in several cases rendered their interpretation likely or at least possible. But is it certain that they appear, along with Aphrodite, Peitho, Nemesis, Tyche(?), Heimarmene, and Himeros, on an amphoriskos of 430-425 B.C. (no. 14), on which only the names of the divine figures are painted? It is odd that the painter left anonymous the pensive woman

seated on the lap of Aphrodite and the man with a spear with whom Himeros is talking, if he wanted to represent heroes as famous as Helen and Paris. The presence of Nemesis in the group of the divinities of Fate and Love is not necessarily to be explained by her rôle as mother of Helen. A scene of persuasion of the same form is reproduced in neo-Attic reliefs (nos. 170-173) of which one bears the names of Helen and Alexandros, and in Roman paintings. Mme Ghali supposes that the amphoriskos and the reliefs go back to a common prototype which would be a painting of the time of the Parthenon. But even if such a model existed one could not affirm that it represented the encounter at Sparta. The central group of the two female figures was used to represent persons other than Aphrodite and Helen, for example in the fresco of the Aldobrandini Wedding. The question which arises here, and which will arise again several times later, is probably insoluble. Was the iconographic type created to illustrate an episode in the story of Helen before being applied to other persons? Or was it the other way round? Mme Ghali herself, following others (cf., for example, Metzger, *Les représentations dans la céramique attique du IV^e siècle*, 283-86) formulates some reservations which she has not sufficiently taken into account: "Le type de Pâris devant Hélène est confondu dans l'esprit des artistes avec celui du jeune homme dans le gynécée. . . . Dans bien des cas, nous n'aurions pas connu le dessein de l'artiste s'il n'avait pris la précaution de désigner ses personnages par des inscriptions." Still, the presence of inscriptions on a monument does not assure that the same interpretation must be applied to all similar scenes: "Des noms de déesses n'étaient donnés aux personnages que pour rehausser leur prestige et, bien souvent, il n'y a plus de différence dans la réalisation entre déesses et mortelles."

The different types of intimate scenes (visit of the young man, adornment of the young girl, persuasion of the bride-to-be) are represented in the fourth century B.C. in Attic and Italiote pottery and on Etruscan mirrors. Thanks to his oriental costume Paris is often identifiable. The subject of his visit to Sparta furnished the painters the opportunity to represent these "barbaron hyphasmata" which were then fashionable. Priam, Dionysos, Iakchos, the Arimasps, all enjoy the same popularity. In all probability the success of amorous scenes and of oriental exoticism in the art of the fourth century owes nothing to the story of Helen and Paris. It is the reverse which holds true.

The departure of Paris and Helen appears on one of the masterpieces of Greek pottery, the skyphos by Hieron and Makron (no. 11) and on a cup by the same artists (no. 12). Had it been represented before? On shield-straps from Olympia of the first half of the sixth century, on black-figured amphorae of the second half of the same century, and on a red-figured lekythos of about 470 B.C. (nos. 1-10) a warrior is shown who brandishes a sword and leads or precedes a woman who sometimes holds a distaff and a spindle. Mme Ghali hesitates to recognize on these monuments the

departure of Helen and Paris or the encounter of Helen and Menelaos at Troy; she inclines toward the first explanation. The warrior does not directly threaten the woman with his sword. It is hence hardly likely that Menelaos is meant, although this argument is not decisive. But if Paris is intended, who are the adversaries against whom he has drawn the sword? Nobody opposed the departure of the lovers. Kunze who already thought of these interpretations also suggested others as equally possible. We could have here an Achaean chief leading a captive Trojan woman, or any other scene of violent abduction, even Theseus and Helen. As a matter of fact, the scene cannot be identified (cf. Brommer *Gnomon* 25 [1953] 70).

The departure of Paris and Helen in a chariot is said to be represented on a red-figured egg of the Martin collection (no. 23). Mme Ghali asks me to explain that this interpretation was first made by Dietrich von Bothmer who will publish the egg in the forthcoming Guennol catalogue (in press). The funerary use of eggs has been the subject of numerous studies, cf. most recently Schauenburg in *JdI* 68 (1953) 64, note 138, and 67, note 154; *Charites* (Festschrift Ernst Langlotz) 172, note 10; Picard in *RA* (1957) I, 120-22. Sometimes, at least, if not as a general rule, two eggs were deposited in a tomb (cf. painting in a Paestan tomb [Maiuri, *Peinture romaine* p. 21], tomb-find from Praeneste [NSc 1897, 261-63, figs. 3-4]). It is certain that the Martin egg was found in the same Attic tomb as the egg in the collection of Hélène Stathatou (Metzger, *MonPiot* 40 [1944] 69ff). The Stathatou egg has been attributed by Metzger to the Eretria Painter; Beazley has accepted the attribution (*Some Attic Vases in the Cyprus Museum*, 48). The Martin egg seems to be by the same hand. Two eggs, painted by the same artist and placed in the same tomb could have constituted a pair, and the scenes painted on the two vases could have been taken from the same legend. This is only a hypothesis, but it must be considered. Mme Ghali has done so, but recognizes that an interpretation drawn from the story of Paris and Helen hardly suits the scene on the Stathatou egg.

Even if we consider the Martin egg independently of the other, the proposed interpretation does not appear to me to be absolutely certain. We see on this vase, in the presence of Aphrodite and Eros, a man carrying off a woman in a chariot drawn by four galloping horses, preceded by a running man with two spears. The motif belongs to a series of abduction scenes or apotheoses by chariot which date from the second half of the fifth century and from the fourth: for example, the rape of the Leucippides on the hydria by the Meidias Painter, the chariot race of Pelops and Hippodameia on his amphora in Arezzo, the abduction of Kore on a skyphos from Eleusis (*AM* 21 [1896] pl. 12), the abduction of Basile by Echelos on the Phaleron relief, an abduction scene on a relief from Rhodes (Picard, *Sculpture* 2, pp. 834-35, figs. 332-33), the apotheosis of Herakles on metal phialai and terracotta vases (Richter, *AJA* 54 [1950] 357ff; Metzger, *Représentations* pls. 22, 1; 28; 29,1). On the

Martin egg, the attitude of the two persons in the chariot—the man holding the reins with both hands, the left arm passing round the waist of the woman (who with her right hand holds on to the rail of the chariot)—resembles very closely that of Polydeukes and Helera on the hydria with the Leucippides, and that of Echelos and Basile. Once again, therefore, we have an iconographic type which has been applied to numerous and differing subjects. At least once, in the fourth century, it was used for Helen: on a squat lekythos in Leningrad (no. 159), where the costume of the man leaves no doubt as to his identity, or that of the naked woman who is in the standing chariot. But if on the Arezzo amphora the inscriptions did not designate the persons, would one recognize Paris and Helen with as much reason as Pelops and Hippodameia? Even the detail of the seascape would evoke the embarkation at Gytheion and the voyage to Troy. In an appendix Mme Ghali herself has stressed the difficulty of distinguishing the two subjects on Roman terracotta reliefs. The presence of Aphrodite and Eros on the Martin egg is an argument in favor of the interpretation upheld by Mme Ghali, but Paris and Helen are not the only lovers, anonymous or famous, in whom ancient art is interested.

The driver of the chariot wears a sleeveless tunic, a costume which is inappropriate to Paris and would better suit a charioteer. The man who runs in front of the chariot would be Aeneas according to Bothmer and Mme Ghali. On a Homeric bowl published by her (p. 313, fig. 2) Theseus and Perithous abduct Helen in a chariot, and the three have taken their places in the chariot. It is true that elsewhere Perithous runs beside the horses of the chariot on which Theseus has mounted with Antiope (cf., for example, a black-figured hydria in New York [Bothmer, *Amazons in Greek Art* pl. 67,3]). On a certain number of the monuments mentioned above, however, and on others (e.g. reliefs at Lisbon and from Herculaneum, mosaic from Olynthos [Picard, *Annuario* 24-26 (1946-48) 213ff; Maiuri *ibid.* 221ff] where a figure runs in front of a chariot), it is always a god, most often Hermes. On the squat lekythos in the Hermitage Hermes steadiest the horses of Paris's quadriga. The composition has the character of an apotheosis where the god would play his usual rôle. On the Martin egg this figure does not bear the traditional attributes of Hermes, neither the caduceus, nor even the winged boots which Mme Ghali claims to recognize, but at that period it sometimes happens that they are absent. Because of the solemn character of the abduction in the presence of divinities it is possible, yes even probable, that the figures are no mere anonymous mortals. Their identification with Paris and Helen is not excluded in spite of the objections made above. But there is no decisive indication which supports this interpretation, tempting though it is.

The embarkation of Paris and Helen is perhaps represented on a late geometric krater. Mme Ghali prudently puts this vase among the uncertain monuments since other interpretations are equally possible. The

subject was not treated in archaic or classic art—to judge, at least, from extant monuments. It is claimed, however, that two series of monuments were inspired by lost works: one consists of Roman reliefs and Pompeian paintings, the other of reliefs on Etruscan urns.

Two Pompeian paintings (nos. 189-190) go back to the same model, of the mid-fourth century B.C., according to Schefold. A woman with a dreamy and melancholy air puts her foot on a ship's ladder. She is supported by two smaller figures, one of them male (a slave?), the other female (a servant, her own daughter, or a sister?), and is followed by armed warriors. At the prow of the boat an anonymous figure, apparently a simple sailor, awaits her. This woman has been taken to be Chryseis (Rizzo, Maiuri), or Iphigenia, or Helen (Lippold, Schefold). For the last hypothesis the absence of Paris from the side of the woman or the prow of the boat is embarrassing. If she is in love and embarking of her own volition, why could she not be Ariadne or Medea as well as Helen? And if it is a forced departure why not Iphigenia, or a captive like Cassandra or Andromache?

Not less uncertain is the interpretation of a series of Etruscan relief urns (nos. 231-256) which for the most part come from Volterra. A woman moves toward a ship, while putting up a certain resistance against two persons who pull and push her. Others load a krater on the ship. On the beach, in front of the ship, the leader of the band (wearing a pointed cap) is seated on a chair. He pays little or no attention to the arrival of the woman. Ever since Brunn it has been accepted that the scene represents the embarkation of Helen and the loading of her "possessions" on the boat of Paris. The attitude of the leader, that of the woman, and the loading of the krater suggest rather the picture of the preparations for the departure of a victor with his loot, of which the woman and the krater would be part.

To sum up, whereas the encounter of Paris and Helen can be recognized with certainty or with a sufficient degree of probability on monuments of the second half of the fifth century and of the fourth, which reflect the taste of the time for intimate scenes, the amorous adventures of the heroes and the tales of the "Arabian Nights," the abduction of Helen by Paris, was only rarely represented in ancient art. Have we any reason to be surprised? Mme Ghali stresses the peculiar character in Greek mythology of this abduction of a married woman who of her own free will follows her lover. Her willingness relates her to Ariadne and Medea, whose departure was not any more popular with the artists (on the Medea myth see Erika Simon in *Gymnasium* 61 [1954] 203ff). The archaic period preferred abductions by force, agitated scenes. At the beginning of the fifth century, the skyphos and cup by Hieron and Makron, and later, in the fourth century, the squat lekythos in the Hermitage, quite different in character, solemn and hieratic, remain the only monuments on which the departure of the lovers from Sparta can be identified with certainty.

The end of the adventures of Helen, ten years later, is represented from the middle of the sixth century B.C. on under three aspects: the encounter with Menelaos, the pursuit of Helen by Menelaos, and the departure of Helen who follows her husband under the threat of his sword.

On black-figured vases we see, facing each other, a woman and a warrior who threatens her with his sword. Often he is accompanied by another warrior. Various interpretations come to mind, for instance Klytemnestra between Orestes and Pylades, Helen between Theseus and Perithous, or a Trojan captive threatened by Achaeans. At least for a certain number of monuments it is probable that we have Menelaos and Helen, but the interpretation of a relief from Sparta (no. 24) remains in doubt.

At the same time another composition is developed which goes on until the fourth century B.C. This is the most animated and picturesque incident of the story: Menelaos, sword in hand, pursues (or seizes) Helen who flees (or tries to flee). On an amphora by Oltos and Pamphaios (no. 44) and on a skyphos by Hieron and Makron (no. 53) the two figures are identified by inscriptions. Do all similar scenes represent the same subject? Mme Ghali rightly notes that on vases where a man pursues a woman sword in hand the figures are impossible to identify. In those cases, do we have, as she says, a "type dérivé," resulting from a degeneration of the subject of the pursuit of Helen by Menelaos? Or rather, are the scenes of the encounter of the couple only special applications of an iconographical type which originally was not connected with the legend of Helen?

Developing with the taste of the time, in the second half of the fifth century the episode takes an amusing turn. At the sight of Helen, often helped by Aphrodite and Eros, Menelaos drops his sword (vases by the Berlin Painter, nos. 58-60; Parthenon metopes, no. 73; Vatican oinochoe, no. 72, etc.). The period when this subject was popular coincides with the one in which the encounter of Helen and Paris is most often represented. In the Italiote and Etruscan pottery of the fourth century Aphrodite disappears. Either Helen only has to unveil her body to disarm Menelaos, or else the furious husband pursues his wife to the very feet of the statue of Athena and seizes her by the hair. In this case the story of Helen is confounded with that of Cassandra. The two heroines were probably already pendants on the pediments of the temple of the Argive Heraeum and the temple of Asklepios at Epidavros. There is the same confusion on Etruscan mirrors. The origin of this confusion is probably to be sought in the application to mythological subjects of an iconographic composition which is general in nature. The subject of a woman who embraces the statue of a deity and who is roughly handled and stripped by her assailant appeared, for instance, in the Centauromachy frieze of the temple at Bassae.

The third variant develops parallel with the two others in the second half of the sixth century. A warrior, either alone or with a companion, leads a woman

by the edge of her himation or her wrist, looking back at her and pointing the sword in her direction. The painted inscriptions on a plate by Oltos (no. 99) prove that on this vase the scene represents Menelaos leading Helen toward the Achaean ships. The subject was popular in late black-figured pottery, the Antimenes Painter in particular having treated it several times. In this case also, there is a "type dérivé" with anonymous figures, and we have again varying applications of the same composition. The only difference between these vases and the monuments discussed earlier (shield-straps and vases on which the author proposes to recognize Paris abducting Helen) is that here the warrior turns his sword at the woman he leads, whereas there he brandishes it, or points it in front of him.

Is the story of the abduction of Helen by Theseus only a doublet, more recent in date and Attic in origin, of the legend of Helen and Paris? The author compares the testimony of the texts with that of the monuments. In all likelihood the story was known to Homer and the *Cypria*, and its earliest known representation is Peloponnesian, if we admit the interpretation which is generally accepted and which seems to impose itself for the scene painted on a Protocorinthian aryballos in the Louvre. The scene is identified by inscriptions on an amphora by Euthymides and on a Homeric bowl. On the other Attic black-figured or red-figured vases cited by Mme Ghali (woman seized by the wrists by two men; abduction in a chariot) the interpretation is possible, but not certain (cf. Brommer, *Vasenlisten* 131).

Owing to the uncertainty of some interpretations the conclusions of the book cannot be considered as entirely assured. The fault is not the author's but lies in the very nature of the episodes of the legend. If it is not certain that Helen *must* be recognized on all the monuments assembled by Mme Ghali, at least she *can* be. The author did not shirk tackling a subject involving a vast amount of material, both literary and archaeological. Her book, however, is more than a simple summing up of literary works or a catalogue of works of art. It is written with talent, with a very fine psychological sense, and with sympathy for the heroine. Mme Ghali has succeeded in recreating a Helen who is alive, human, and very feminine.

The following notes and corrections of details are by D. von Bothmer, who has also translated this review. The Hearst stamnos (p. 70, note 1) and the neck-amphora of the same collection (p. 102, no. 96) are now in the Metropolitan Museum of Art and bear the accession numbers 56.171.51 and 56.171.18. Another neck-amphora from the same collection (p. 108, k; *ABV* p. 478, no. 2) has passed into the collection of Dr. M. Prinzmetal of Beverly Hills, Calif. Under no. 103 (p. 104) the author has confused two vases. The Bastis vase is a neck-amphora and is unpublished. The one which is illustrated in *Cat. Sotheby 12 July*

¹ Cf. J.-L. Robert, *BullEpigr* no. 325 in *REG* 69 (1956); C. B. Welles, *AJP* 78 (1957) 221ff.

² Cf. W. K. Prentice, *Amer. Exp. Syria* III 8ff.

1927, no. 148, is a panel amphora in the Hearst collection at San Simeon and is not by the Antimenes Painter. Another neck-amphora by the Antimenes Painter, p. 100 no. 86, is now in the Virginia Museum of Fine Arts in Richmond (accession number 57.9; *ABV* p. 271, no. 78 [which must be identical with *ABV* p. 691, Antimenes Painter no. 78 bis]). The neck-amphora p. 101, no. 94, was last recorded in the collection of Rev. J. Hamilton Gray and was sold at Sotheby's on June 7th, 1888 (lot no. 23).

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INSCRIPTIONS GRECQUES ET LATINES DE LA SYRIE (Institut français d'archéologie de Beyrouth, Bibliothèque archéologique et historique, vol. LXI), Vol. IV; Laodicée. Apamène, nos. 1243-1997 by Louis Jalabert, René Mouterde, Claude Mondésert. Pp. 379. Paris, Geuthner, 1955.

1. It is a particular pleasure to welcome another volume of this great undertaking and to express the warmest congratulations and gratitude to Father Mouterde, the beloved doyen of Syrian archaeology. As in the previous instalment, he has had the collaboration of Father Mondésert, who is well known as a specialist in Patristics.

The texts are presented with translation and full apparatus and commentary.¹ Most are Christian—epitaphs and inscriptions on churches and other buildings (including baths). Of necessity certain formulas and Biblical quotations recur very often; their recurrence is instructive.²

Some have individual features of special interest. Thus 1418, in expressing the familiar idea of Jesus as Healer,³ uses the form *Iasous*; the name was sometimes associated with *iaomai*,⁴ and we may ask whether this unfamiliar form was employed to underline the point. 1547 is unique for the region, as being in Latin. 1558 has attracted attention because of its outright statement that without burial a man cannot enter Paradise. 1597 is interpreted as belonging to a hostel for laborers coming from elsewhere.

2. Judaism is represented by texts from the synagogue of Apamea (1319ff). Nearly all refer to the giving by individuals of parts of the mosaic floor, commonly "for the *soteria*" of their households or of specified relatives. E. R. Goodenough, *Jewish Symbols in the Greco-Roman Period* II 84 translates "for the salvation" and remarks, "The word, at that time, must have been eschatological, and the donors must have been much concerned about the next life, though of course it probably included prosperity in this life" and (*ib.* 91) interprets in the same way *pro salutem suam* in the Naronitan synagogue (Diehl, *I. Chr. lat.* 4940).

¹ Cf. E. Kantorowicz, *DOPapers* 9/10 (1956) 239.

² Cf. Foerster in G. Kittel, *Theol. Wbch.* III 290.

Some reference to the desire for happiness in the hereafter is not out of the question. C. C. Torrey explained a fragmentary Aramaic building inscription at Dura (Carl H. Kraeling, *The Synagogue [Excavations at Dura-Europos, Final Report, VIII i] 263f*) as expressing a hope of reward related to "the world which is to come" (a Jewish form of expression).⁵ It was widely held that certain types of good action might lead to a share in the life of the world to come; to be sure, such action lay primarily in conformity to the Law or in works of charity (H. L. Strack-P. Billerbeck, *Komm.z.N.T. aus Talmud u. Midrasch*, IV 3ff, 1038f, 1042f). Be it added that there was also a conviction that no individual could feel that his calling and election were sure (*ib.* II 239; III 218ff). Yet it must be remarked that the *archisynagogus* in the inscription on the mosaic for the entry (1320) mentions the *soteria* of his wife, children, and mother-in-law, and the memory (*mneia*) of his ancestors. Here it is manifest that *soteria* is, as Sukenik renders throughout, "welfare" and not "deliverance in the hereafter." For *soteria* as so used by a Christian cf. J. Ebersolt, *RA* (1911) i, 417 (the wellbeing of the living, mentioned with the repose of the dead; for the idea cf. *AnthPal* I 10,75f). Be it added that at Apamea, out of eleven donors who speak of *soteria*, only three mention their own; this hardly fits Goodenough's picture.⁶

3. Among documents of paganism we may note 1261, a Roman copy of an earlier decision of the authorities of Laodicea ad mare safeguarding the rights of the priests of a private temple of Sarapis and Isis. This was a family property, like the first shrine of Sarapis on Delos;⁷ its owners secured a decision that people who wished to erect statues therein should make appropriate payment. Clearly the sanctuary, though private, had no little local standing—enough to satisfy the instinct of self-importance as shown in portrait statues.

Otherwise, apart from a bronze of Isis Pharia (1309), a bust dedicated to Antinous (1300), and amulets (1284ff, 1307f) with their universal language, the piety represented is, as in so much of Anatolia, regional or local. The *theai epekooi* who appear in an unpublished

⁵Cf. Goodenough I 261.

⁶The formula, with a woman's name, appears on a column-base at Alexandria (Preisigke, *Sammelbuch* 2654; J. B. Frey, *Corp. Inscr. Iud.* 1438); this likewise may represent a contribution to the cost of a Jewish structure. For pagan analogies cf. F. Cumont, *Fouilles de Doura-Europos* 427 no. 85; Lebas-Waddington 1855 (also *MAMA* VII 243, 281a); *Dura Rep.* VII/VIII 168ff; Welles, *YCS* 14 (1955), 129, 132, 140—not to mention the use of the phrase with reference to the emperor (there can be no concern for his well-being in the hereafter). On the range of *soteria* cf. Nock, *Sallustius* xxxvi.

For Christian usage of cf. Jalabert-Mouterde, *DACL* VII 689; E. Peterson, *Heis Theos* 18f; *Gerara* 486 no. 333.

(No. 1682 is to be added to what was said in *The Joy of Study . . . F. C. Grant* 144ff on the neutral use of *soter* in Christian texts; the builder of a fort is addressed thus, "Thou hast appeared as a *soter*, God the *soter* having a care to aid in thy plans" [dated in 558].)

⁷Conversion 50ff.

⁸For such autobiography cf. *HarvTheolRev* 45 (1952) 237,

text (1262) may well be, as is suggested, the Nymphs of a spring.

Two little groups of texts may be remarked. First is the tomb of Abedrapsas and his wife, with A.'s statement of how the god of his forefather Arcesilaus had enabled him to learn a craft rapidly when he was apprenticed at the age of 25 (later than the age given for that in Lucian, *Somn.*) and to buy a property without anyone knowing it (1409-11). A. Alt, *Der Gott d. Vater* (reprinted in *Kl. Schr.* I 1ff esp. 43f) has noted the relevance of this for the idea of "the God of Abraham, of Isaac, and of Jacob."⁹

Secondly, we may consider three rock inscriptions (1799-1801):

A. ἦτος δέξφ', ὅτε οἱ ἄνθρωποι εἰς νέ(μ)εστιν ἔσταυτο. ὁ δὲ ἥρως τὸν Κρόνον ἐκάλεσε καὶ ἐδόθη [α]ὐτῷ νέκυη. ο[ῦ]τε βάρβαροι οὐ[τ]ε (τ)ις ἐν τῇ γε(ι)τονίᾳ ἐβλάβη (ο)τ(i) τ(ά)ξαν (?) δικῶν εἰσηγόμενοι διδεῖ[ν] v.g. ποιητὴ οἱ . . .

B. ἀνάγνωθι τὰ γεγραμμένα καὶ πίστευσον.

C. πανάρετος ὁ θεός ἐφίλησεν τὴν ὀρθόβλεψιν καὶ τὴν αὐτήν (θ)έμι ένει τούτοις προσθετούσιν αὐτο[ῦ].

"L'an 564 [i.e. A.D. 252/53], lorsque les hommes s'exposèrent à la justice vengeresse. Et le héros invoqua Kronos et victoire lui fut donnée. Ni les Barbares, ni personne dans le voisinage ne souffrit de dommage, parce qu'ils réglerent (?) que subiraient un juste châtiment de leurs crimes ceux qui . . .

"Lis ce qui est gravé (sur la pierre) et crois!

"Le dieu de toute puissance aime la loyauté et veut qu'elle existe en sa présence."

For convenience I reproduce text and translation in full, but I must remind the reader that these inscriptions are very ill preserved: the lettering did not have the permanence hoped for in Job 19.24 (a text of importance for the idea of leaving such a record).¹⁰ In spite of repeated meticulous study there is no chance of anything like a full restoration. The phrasing as reconstructed is tortuous, but not in general more so than might be expected in an attempt at solemn writing on the part of a pious Syrian, particularly if Greek was not his mother tongue (might it be significant that A is written in three columns and that the one on the right is to be read first?); but *νέμεστιν* seems unlikely.¹⁰

JRS 43 (1953) 187.

⁹Prof. Welles refers me to the record (L. Mowry, *BASOR* 132 [1953] 34f; cf. J.-L. Robert, *Bull. no. 248* in *REG* 68 [1955]) of a barber and a luteplayer accompanying a "general of hoplites" into the Transjordanian desert; it is prefaced by "life is nothing"—a scrap of gnomic thought such as we often find in epitaphs.

¹⁰In C perhaps punctuate after π. δ. θ., making it an acclamation, "God (or 'the god') is allpowerful," like *εἰς θεὸς Σάπανις* or *εἰς θεός*: in A read perhaps *οὐτε* ις (= εἰς) in lieu of *οὐτε* (τ)ις.

In A, *οἱ ἄνθρωποι* calls for comment. It may seem to exemplify a natural tendency to think of one's own region as the world.

But is not the meaning "men" in contrast with the supernatural, of which we are to hear? H. Seiler, *Glotta* 32 (1953) 225ff has remarked that in Homer *anthropos* usually appears in the plural and with this antithesis: cf. H. St. J. Thackeray, *Lexicon to Josephus* 49 for similar usage, as also for the common contrast with animals (for which cf. L. Robert, *Hellenica* II 153; X 104).

What is certain is that a battle took place in a specified year, that the happy outcome is ascribed to Kronos (presumably the Syrian cosmic deity), and that religious and moral lessons are found in this.

J. Lassus, who first published the texts, remarks on their resemblance to aretalogical language. Rostovtzeff, *Berytus*, 8 (1943) 39n.52 compared *AnnEpigr* (1935) no. 164, a text of the same era telling how Mars Gradivus had been invoked and had given victory.

But there remains a difference. Aretalogies give concrete detail. The Gradivus text mentions the Roman commander and the name of the legion that he commanded: the opponents are not specified but the phrase, *ad eradendum nomen saevissimae dominatio-nis*, like *h(ostium) p(ublicorum)*, indicates clearly that this was civil strife. So the Panamara document published by P. Roussel, *BCH* 55 (1931) 70ff gives a vivid picture of human action and divine direction and intervention. In a much earlier period Isyllus does not indeed tell us just how Asclepius prevented Philip's purpose at Sparta, but he does record the god's appearance and revelation to the boy who was in fact himself.

With all due allowance for the uncertainty of the wording of our texts, the story they tell must have been impressionistic and general—not indeed with the studied obscurity with which an Athenian epigram of the fifth century B.C. ascribed a defeat to a supernatural being, after the neglect of a prophecy which should have served as a warning.¹¹

Would it be fanciful to suggest that we have here a special and native mode of expression? I am thinking of the brief songs of victory recognized in Numbers 21, 14f, 27ff,¹² and of what is said of battles in Koran 3.11 and 8 (cf. 105). These Suras are in notable contrast with the royal inscriptions of the Near East. The king there appears as chosen or aided by divinities, and in the Achaemenid texts (with which II Sam. 22 may be compared) he has the role of a crusader. Yet, whether *Ichstil*¹³ is used or not, the emphasis is on the king's personal achievements;¹⁴ Muhammad, so to speak, keeps himself in the background. So, again in Sapor's "Res Gestae" the moral and religious comment is appended to the story; here it is the story. "And in all this there is nought but Zeus."

4. Syria, like the rest of Alexander's conquests west of the Euphrates, was subjected to the educational in-

fluences studied by Nilsson in *Die hellenistische Schule*. The Apamean boy "dear to Hermes and to the Muses and to all the wise" (1350) would have had his counterparts in many less cultivated communities. But we must have our reservations as to the degree to which higher culture penetrated;¹⁵ in religion there was a notable conservatism. For the understanding of this, as of so much else, we depend largely on inscriptions. For their utilization it will be of material service that the present volume includes a list of all dated texts in it and its predecessors, prepared by Henri Seyrig, the prince of interpreters of Syrian antiquities. It remains to repeat the gratitude expressed earlier to the editors; the continuation of their work will be eagerly awaited.¹⁶

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DIE TERRACOTTAGRUPPE EINER DIANA MIT DEM HIRSCHKALB, by Reinhard Herbig. Abhandlungen der Heidelberger Akademie der Wissenschaften, Philosophisch-historische Klasse, 3. Abhandlung. Pp. 32, figs. 37. Carl Winter, Universitätsverlag. Heidelberg, 1956. DM. 16, 80.

The author is a former professor of Archaeology at the University of Heidelberg and the present director of the German Archaeological Institute at Rome. He is the author of *Götter und Dämonen der Etrusker* (Heidelberg 1948) and of *Die jüngeretruskischen Steinsarkophage* (Berlin 1952). He therefore appeared well equipped to defend the terracotta group of a Diana with a Fawn, acquired by the City Art Museum of St. Louis, Missouri, against the suspicion of being a forgery which had been uttered by scholars as well as by laymen.

According to the author, the story of the group is the following. Probably found in 1872 near Civita Castellana, it remained in the same family for 60 years, until it came into the hands of art dealers. At that time a series of photographs was made, which show the group in pieces, held together by cords (German Inst. Negatives 37.1326-1331 and 38.306-312. Herbig, figs. 1-2, 32, 34). The group was then restored, with

¹¹ Cf. A. Cameron, *HTR* 33 (1940) 97ff (now in W. Peek, *Griech. Vers-Inscriptions I*, 17). Prophecy, whether genuine or post eventum, naturally uses such language; cf. the deliberate obscurity of the Demotic Chronicle (C. C. McCown, *ib.* 18 [1925] 387ff).

¹² Cf. R. H. Pfeiffer, *Intr. O. T.* 274. (In *SIG* 1122 "the men of Selinus are victorious because of these gods" does not stand by itself but is the reason assigned for an act of grateful piety. In *Hdt.* 8.109.3 "It is not we who have achieved these things, but the gods and the heroes" is not a lapidary statement but an argument against pursuing Xerxes. The reader may think of J. H. Breasted, *Ancient Records of Egypt*, III, 428, as a parallel: but this is a stele in a temple, and actually refers to a success achieved without military action!) For altogether different expressions of piety after victory cf. *ILS* 628 and 8908 (each after a bloodless encounter), *CIL* VIII 8924.

¹³ On this cf. *Gnomon* 21 (1949) 224f.

¹⁴ Cf. S. Mowinckel, *Eucharisterion . . . Gunkel*, I 278ff esp. 297ff.

For convention in Egyptian records of kings cf. J. A. Wilson, *ProcPhilSoc* 100 (1956) 439ff. (Arabian inscriptions speak of divine aid to kings on campaigns [cf. G. Ryckmans, *Les religions arabees préislamiques* 34], but do not, to my knowledge, introduce miracle or moralization.)

¹⁵ Cf. Nilsson, *Gesch.* II 31f; P. Peeters, *Le tréfonds oriental*. For the Hauran cf. *JRS* 43 (1953) 186f.

¹⁶ It would be a great convenience if the last volume could include a concordance with the numeration of Lebas-Waddington and the Princeton and American Expeditions to Syria.

* My warmest thanks are due to R. N. Frye, G. Luck and C. B. Welles for friendly aid.

wrong additions, and covered with paint. Thus it appeared in the *Illustrated London News* of September 19, 1953 (Herbig, p. 8, fig. 4). At the same time the 21 fragments before the restoration were published there (Herbig, figs. 5-6). Most parts of the statue appear in these fragments, except the bow in the left hand and the quiver which was attached by the restorer to an oblong venthole in the back. The lack of a baldriac testifies that there was no quiver, while a round staff in the hand indeed testifies for a bow (Herbig, p. 14, figs. 4, 13, 14, 21). Both attributes were removed by a second restorer.

Herbig discusses at length the plinth, construction and motif of the group, the attributes and the dress of the Diana (pp. 10-23), then the style and the period of the work (pp. 24-29). His result is that the group is not purely Etruscan, but represents a mixture of Etruscan, Faliscan and Latin art schools. He sincerely believes that he has answered all the doubts, which the professor of Etruscology and Archaeology at the University of Rome, Massimo Pallottino (*ArchCl* 6 [1954] p. 170f, pl. 43) had expressed in writing, and the professor of Archaeology at Columbia University and author of a forthcoming book on Etruscan art, Otto Brendel (see Herbig, p. 30) had expressed orally. The late Ludwig Curtius, then director of the German Archaeological Institute, had written "Fälschung" (forgery) on the photographs (Herbig, figs. 1-2).

The reviewer shared their suspicion that the Diana is a fake, particularly on the ground of inconsistencies in the dress. The form of the mantle would be impossible in antiquity. It seems to be a combination of the diagonal mantle pinned on one shoulder and upper arm, with the two endings hanging down at one side as worn by most of the Korae from the Acropolis, and the small mantle hung over both shoulders with equally long endings on both sides, as worn by a few statues from the Acropolis (Payne, *Archaic Marble Statues from the Acropolis*, pl. 34, no. 678 and pl. 62, no. 673), as well as one torso from the pediment and the Nike from the Acroterion of the Apollo Temple at Delphi (C. Picard and P. de la Coste-Messelière, *Fouilles de Delphes*, IV, pl. xxxiv, 1-2, Text IV, 3, pp. 49ff, pls. hors-texte VIII and X; P. de la Coste Messelière and J. Macardé, *BCH* 77 [1953] p. 370f, fig. 6). I was dismayed to find myself quoted by Herbig (p. 18) as having proved that the small mantle was really worn in Greece (Bieber, *Entwickelungsgeschichte der griechischen Tracht*, p. 31). The passage quoted by him, reads, however: "Hier könnte eine manierierte Spielerei der Kunst, nicht wirkliche Mode zugrunde liegen, doch könnte man auch an letzte Auswüchse der damals bereits überlebten und absterbenden Tracht denken" ("here a manneristic playing-around by the artist could be the basis, not real fashion, although one also might think of the last excrescences of a costume which at that time was already outlived and dying").

I also object to the examples given by Herbig for the straight line of the "Halsausschnitt" (cut-out neckline, p. 19). The Greek dress never had a cut-out neckline. When the part between the two shoulders appears

straight, it is drawn taut by the pins on the shoulders. This is the case in all the examples quoted by Herbig: the peplos of Europa on the bowl from Aegina in Munich (Furtwängler-Reichhold, *Griechische Vasenmalerei*, pl. 114, 1; P. Jacobsthal, *Greek Pins*, fig. 335) and of the woman on the white ground lekythos (Pfuhl, *Malerei und Zeichnung der Griechen*, fig. 544) as well as the chlamys of Hermes on another white ground lekythos (*ibid.*, fig. 542). The dalmatica (Herbig, fig. 3) has nothing whatever to do with Greek dress. It is a late derivation of the Roman tunic, which indeed has an open square woven on the loom (see Lilian Wilson, *The Clothing of the Ancient Romans*, 55ff; Bieber, *op.cit.*, 40ff).

Another point which awakened my suspicion is the way in which the right hand draws the chiton forward instead of to the side as we find it in the ancient Korae. Despite the pull, the edges fall in zigzag folds and open up to show the nude leg (Herbig, figs. 14, 19, 22). In the ancient Korae it is the left, not the right, hand which pulls the dress, except in counterparts like the caryatids from the treasures in Delphi (Homolle, *Fouilles de Delphes*, IV, pl. xx; text IV, 2, pp. 51ff, fig. 33). In any case, however, the hand takes the central part of the dress and pulls it taut to the side. There is, therefore, no possibility for an opening and for zigzag folds. The motif of the denuded leg is taken, rather, from the peplos of Laconian and other young girls, which is unsewn and ungirt (see Bieber, *Griechische Kleidung*, p. 34, pl. II).

Despite these and other observations of mistakes in the rendering of details, the statue is not a forgery in the sense that it was made to fool the onlookers and buyers. Everybody who has seen the book, Walter Lusetti, *Alceo Dossena-Sculpture* (De Luca Editore, Roma 1955) knows by now that the Diana with the Fawn is by the Italian sculptor Dossena. Here the group appears on pls. 7-9 from photos taken in the workshop of Dossena in exactly the same state as on the photos of the German Institute (Herbig, figs. 1-2), not yet cleaned and held together by cords. Dossena died in 1937 and the photos in the German Institute were taken in the winter 1937/38, as the first parts of the numbers on the negatives indicate. The comparison with other works by Dossena confirms this attribution; the imitation of the group of Theseus carrying Antiope from Eretria (Lusetti, pls. 1-2), of a Kore (pls. 3-4), of the striding Athena (pls. 5-6) which is so strikingly similar to the walking Artemis of Pompeii (Herbig, figs. 15 and 37) indicate how Dossena was able to feel his way into the style of the archaic period and to create works of art based on the artistic tradition of this age, as he did of other periods. "Dossena created masterpieces attributed by museum directors and other scholars to Giovanni and Nino Pisano, to Donatello, Simone Martini, Vecchietta, Amadeo, Mino da Fiesole and other famous masters, works which nobody suspected were made by a contemporary sculptor. They were not copies of known works but new creations, inspired by the artistic tradition of

the Renaissance, of the Trecento or of Classical Antiquity." (Lusetti, p. 16.)

Thus Herbig is one of many who before him have accepted works by Dossena as being older masterpieces. He was, however, on the right track when he described the Diana as an eclectic work. Massimo Pallottino ("Ostraca," in *ArchCl* 9 [1957] 111-115, pl. 1) has stated how despite his dissent he admires the ability and scholarship of the author. Herbig rightly compares works of the Pan Painter (ca. 480-450), the amphora in Schwerin and the stamnos in Berlin (Herbig, figs. 26-27. Pfuhl, *op.cit.*, fig. 478. Bieber, *Entwicklungs geschichte der griechischen Tracht*, p. 31, fig. 5; J. D. Beazley, *Der Panmaler, Bilder griechischer Vasen*, ed. Beazley and Jacobsthal, IV [1931] no. 25, pls. 19,2 and 20,2). The manneristic Pan Painter is indeed the first in a long list of archaic artists ending with Dossena. He gives to a Nereid and to Clytemnestra a chiton, to Clytemnestra also a peplos with overfold, and to both a small "cape" fastened on both shoulders, with both sides open and with equally long ends hanging from both arms. To Electra and to the Artemis on the vase in Boston (Beazley, *op.cit.*, no. 1, pl. 1 and 3, 1; Pfuhl, fig. 475; Furtwängler-Reichhold, pl. 115) he gives the diagonal mantle with much too long endings hanging from the right shoulder and an impossible pointed end in the center. Dossena combined these two manneristic renderings of the small mantle. His "cape" has unequal endings at the two sides and also the superfluous pointed ending in the center. He has three boxpleats in the front (Herbig, fig. 12) and one in the back (Herbig, figs. 13-14; Lusetti, figs. 6-7). The two side ones, particularly the one near the open edges, are without justification.

Between the Pan Painter and Dossena there is a long row of other artists who were fascinated by the rich and glamorous late archaic dress. The archaic Greek and Roman statues have been treated by Heinrich Bulle (*Archaisierende griechische Rundplastik*, Abh. Bayr. Akademie, XXX, 2, 1918); the archaic reliefs by Eduard Schmidt (*Archaisierende Kunst in Griechenland und Rom*, München 1922; see also his text to the archaic relief with the twelve gods of around 450 B.C., Brunn-Bruckmann, *Denkmäler griechischer und römischer Skulptur*, pl. 660, now in Baltimore). Both have proved that the archaic forms were well known during all ancient periods, and that archaic art developed logically through a continuous tradition. The celebrated names of Alkamenes and Kallimachos belong in the series of archaic artists. It is quite feasible that the Roman owners of such good archaic works as the "Spes" Albani (Brunn-Bruckmann, pl. 651) or the bronze statuette Castellani in the British Museum (Bulle, pl. 3, fig. 25), believed themselves to have genuine authenticated archaic works of art.

Sidelines of this style are found in Cyprus, such as the charming little creature in the Metropolitan Museum, no. 1262 (John L. Myres, *Handbook of the Cesnola Collection* [New York 1914] p. 197). She lifts her chiton with the right hand, while her himat-

ion hangs in two separate long endings from the gathered frill, which goes in the wrong direction from the left shoulder down to the right side, instead of the other way around. Then, there are the Etruscan examples like those from Veii, certainly known to Dossena, and the fine bronze statuette of a girl in the Metropolitan Museum (Gisela Richter, *Greek, Etruscan and Roman Bronzes* [New York 1915] no. 56, pp. 34-38). Her head is executed all around, but the mantle hangs only in the front and does not cover the back. This Etruscan artist probably copied some painting on one of the many Greek vases which were exported to Etruria.

In our century the late archaic style again appeals to the artists. The French sculptor Bourdelle fashioned his "France saluante" (Walter R. Agard, *The Greek Tradition in Sculpture*, p. 47, fig. 31) on the model of archaic Athens like the Hellenistic one in the Louvre (Bulle, pl. 1, fig. 8). The American sculptor, Karl Bitter, clothed his figures on the Karl Schurz Memorial, erected in 1912 by the architect Henry Bacon on Morningside Drive near 116th Street in New York, in archaic dresses (Catalogue of the Works of Art Belonging to the City of New York, Vol. II, p. 84, ill. opposite p. 84).

I consider all these, including Dossena, artists, not forgers. They were able to feel their way into the fascinating style of the late archaic period and to create works of art based on the tradition of this age. The archaic style was always and again revived, and new phases of it were developed in various periods and by various artists.

Herbig has courageously followed the principle that we are not allowed to evade the question whether a work of art is genuine or imitated (p. 5f). The reviewer has followed the same principle of responsibility, and she believes that we have found the scientific truth.

MARGARETE BIEBER

NEW YORK

ETRUSKISCHE PLASTIK, by George M. A. Hanfmann. Die Sammlung Parthenon. Pp. 16, figs. 56 on pls. 48. Stuttgart, 1956.

The superb exhibition of Etruscan art that toured Europe in 1954 was responsible for a spate of new Etruscan picture books, of which this is probably the most recent. Here, a brief analysis of the character of Etruscan art introduces 56 photographs of statues and reliefs to illustrate the history of Etruscan sculpture from its beginnings in the 7th century B.C. to its last manifestations in the first. Professor Hanfmann has made use of a number of excellent new photographs taken at the time of the exhibition,—unfortunately his choice of objects sometimes repeats Professor Pallottino's in *Art of the Etruscans*, another exhibition product. Still, old favorites are seen at least in a new light, often from a new angle and several, in fact, in

a new form,—for example, the Apollo of Veii with the addition of the recently discovered part of the right arm (pl. 17) and the Mars of Todi without his modern helmet (pl. 31). And a good proportion of the pieces is unfamiliar, at least in picture books: the objects shown in plates 3, 12, 16 and 18a, 21, 23, 28, 36, 41 and 42. All these are first-rate pieces that contribute materially to our knowledge of Etruscan sculpture.

The arrangement of the plates is scholarly and at times agreeably illuminating,—as when the strongly Oriental profiles of a seated woman from Cervetri and a bucchero sphinx from Chiusi are confronted (pl. 9 a & b) or the Minerva in Modena and the head of a boy in London (pls. 24 & 25) or the bronze lady in Cambridge and the funerary statue from Chiusi (pls. 28 & 29). Certain characteristics of the figure style of a given period are made prominent by the juxtaposition of photographs,—such as the jutting noses and long chins of early seventh century heads (pls. 2 & 3) or the protruding lips and high cheekbones of the early sixth century (pl. 6 a & b). The modelling of the head of the terracotta Minerva (not, as it is labelled, a warrior) from Sant' Omobono in Rome is so strikingly like that of the reclining man from Cervetri (pls. 12 & 13) particularly in the treatment of the nose, mouth and chin, as to indicate that there was a close artistic connection between the two cities in the late archaic period; in like manner, the comparison between the Zeus of Ancona and the rider from Spina (pls. 22 & 23) suggests very strongly that there was a distinguished school of sculpture in northwest Italy in the fifth century. On the other hand, the superficial resemblance between the bearded silen (pl. 20) and the bearded warrior (pl. 21) is misleading: the rounded, fleshy forms of the silen belong to a different sculptural tradition from the nervous, sharp-edged contours of the warrior. The striking contrast between a charming Hellenistic bronze girl from Cortona (pl. 36) and a seated woman braiding her hair from Sarteano (pl. 37) demonstrates what enormous differences in tradition and technique could exist at the same time in geographically neighboring regions. (Incidentally, I am inclined to date the bronze figure in the second century rather than in the third, as Professor Hanfmann does, since it is my impression that such elongated, mannerist figures do not enter the Etruscan Hellenistic style till the second century.)

As might be expected, Professor Hanfmann's introductory comments on Etruscan art are sympathetic without being sentimental. Enthusiasts who feel a strong affinity between the apparently emotional and expressionistic character of Etruscan art and the art of the 20th century are warned that such appearances may be deceptive since we know nothing about the intellectual or philosophical point of view of the Etruscan artists. Their art should be studied objectively. Looked at historically and in cold blood, it will be seen to depend for inspiration on Greece, and to be neither primitive nor inventive, not an organically creative art but one that borrowed, with varying de-

gress of felicity, from successive phases of the art of Greece. Consequently, Etruscan art is a series of episodes following one another in startled jerks. The truly Etruscan contribution to this imitative art was an expressionism in which the parts were generally more important than the whole (observe, for example, the curious emphasis on the eyes in plates 1, 5-11, 15, 18, 20, 21, 25, 32, 33, 37) and, according to Professor Hanfmann, a realism that insisted from the earliest times on individual traits in portraiture. With this second point I cannot agree: the bronze funerary masks from Chiusi (see pl. 5 and others published by Giglioli, *Arte Etrusca* pl. 59, 2 & 3 and Pallottino, *Art of the Etruscans* pl. 1) are as impersonal and stylized as the faces of Greek kouroi, while the heads of the canopic jars (see pl. 2 and Giglioli pls. 60-63) are individualized only by the arrangement of the hair or the addition of earrings. True portraiture in Etruria is a product of the Hellenistic age and was learned from Greece. No connection can be found between the funeral masks and canopic jars of the seventh and early sixth centuries and the full-length reclining portraits of the Hellenistic period. The best of these (see, for example, pls. 41 & 43), like the Hellenistic portraits of Greece, try to make a single composition of head and body and to show the *ethos* of the subject not only through a facial likeness but through the proportions and attitude of the whole figure. The earlier Italic convention, in which the head "stands for" the man, as on the canopic jars (pl. 2) and occasionally in the later archaic period (pl. 8 a & b), reappears not in late Etruscan but in Roman art. It was the Romans who, following the bad example of Delos, perched a portrait head on a stock body, or, following the Italic tradition, designed a head as a work of art to be seen by itself alone.

The identification of the classic bronze in the Fogg Museum (pl. 28) as Turan-Aphrodite depends on the pomegranate as attribute and on the fact that Turan on a mid-fifth century mirror wears the same costume as the statuette. But essentially the same dress—loose-sleeved chiton, heavy cloak, diadem and necklace—is worn by many other divinities and even mortals on mirrors and tomb paintings; to cite only two, by Semele on the famous mirror in Berlin (Beazley, "The World of the Etruscan Mirror," *JHS* 69 [1949] 9 fig. 7) and by the ladies of the Tomba degli Scudi, Tarquinia (Pallottino, *Etruscan Painting* [Skira 1952] 105, 107). A pomegranate, held in the hand of a funerary statue, may be an attribute or an offering to Persephone, but the fruit was also sacred to Hera (at Argos, Pausanias 2.17.4; at Paestum, O. Brendel, *AA* 49 [1934] 489, and P. C. Sestieri, *Archaeology* 9 [1956] 32). It is not certain, therefore, who this diademed lady holding a pomegranate may be.

Professor Hanfmann also identifies another figure, the winged goddess carrying a child on an acroterion from Cervetri (pl. 14), as Turan carrying her son Tinia, rather than Eos carrying Cephalos, the usual identification. His evidence for renaming the group is, I think, a gem from Chiusi (D. Levi, *NS* [1931]

204) in which a winged goddess carries a dead warrior; the composition is much like that of Douris' drawing of Eos carrying the body of her son Memnon on the cup in Paris (Pfuhl, *Masterpieces of Greek Drawing and Painting* pl. 64), but the names engraved are Turan-Tinias. There is little resemblance between the dead hero on the gem and the child on the acroterion—a similar group occurs on several Etruscan mirrors; the identification of the child with Cephalos is mere guesswork—yet it is possible that, if the Etruscan gem cutter was illustrating an unknown Etruscan myth in which Turan was the mother of Tinia, he might have borrowed the Eos-Memnon composition from a Greek vase because he had no other mother-son composition to borrow. Or conceivably the Etruscan Tinia was like the Cretan Zeus, both a child god and a dying god.

I should like to know more about the previously unpublished ivory kriophoros from Castel San Mariano, Perugia (pl. 7 a), especially the circumstances of its discovery. Professor Hanfmann dates it ca. 550 B.C., and the arrangement of the hair is enough like that of the Rampin head in the Louvre to support this date. But the loose Ionic chiton with its buttoned sleeves and deep *kolpos* is treated too freely to be so early, even if the piece is, as the Zurich catalogue of the Etruscan show suggested, an importation from Ionia. I know of no other Etruscan figure in the archaic period that wears such a garment.

The printing of this book and the excellent reproduction of the photographs do justice to the scholarship and taste of the author. Emphatically, it is not "just another picture book."

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INSCRIPTIONES POMPEIANAE. HONORES ET MUNERA.
ISCRIZIONI POMPEIANE. LA VITA PUBBLICA. By Giovanni Oscar Onorato. (Nos. 182-185 in the series "Il Melograno.") Edizioni Fussi. Pp. 217, pls. 8. Casa Editrice Sansoni, Florence, 1957. 1,000 Lire.

This pocket-sized volume has been admirably produced by both Dr. Onorato (who is already well and favorably known as a serious Pompeian scholar and a member of the administration of Pompeii and the Naples Museum as well as Commendatore Maiuri's assistant in the University of Naples) and his publishers. It is a *sylloge* of 147 items, giving usually one well-preserved inscription for each personage represented, with an Italian translation (which implies interpretation) on the page facing. The notes at the back are sufficiently full for the purpose, and are most helpful; they are the result of some years of study, and they convey an amazing amount of precise information in compact form.

For the purpose of presenting a well-proportioned idea of the public, i.e. the administrative, life of the

community, no distinction is here made between the inscribed stones and the notices painted on the house-walls, nor between the Oscan and the Latin documents. The approach is from the opposite angle to that of Matteo Della Corte's invaluable *Case ed Abitanti di Pompei*. Starting with the official documents, especially the sepulchral and honorary inscriptions on stone, the announcements of spectacles, and the electoral propaganda, Dr. Onorato in his commentary assembles the evidence as to the families and other connections and interests of the several individuals mentioned. The parallels and the additional evidence cited from other localities are most illuminating and helpful. The result is the revelation of an aspect not only of the small Campanian community but of Roman administration and society in general, which would have been very inadequately represented apart from the documentation afforded by Pompeii. Even if some may hesitate to follow Dr. Onorato in accepting at face value the propagandistic recommendations—*d(ignum) r(ei) p(ublicae), v(irum) b(onus), panem bonum fert, probissimum invenem, etc.*—still the expressions used do not appear excessive, and when read in conjunction with the evidence presented by Amedeo Maiuri in his indispensable volume, *L'ultima fase edilizia di Pompei*, the testimony is convincing for a class of substantial, earnest citizens and administrators, who took seriously their responsibilities, especially in times of crisis such as the period of reconstruction that followed the earthquake of A.D. 62. We are afforded occasional glimpses of the "Common People" to whom the electoral appeals were addressed and who are from time to time represented as supporting individual candidates; but for a fuller, systematic treatment of these we may await the promised second volume, on private life. For those whose interests are closely associated with Pompeii, these two small volumes are assured of a welcome and a place among *non legendos libros sed lectitandos* (Pliny, Ep. 2.17.8).

Despite the care and skill expended upon an undertaking which at times must have taxed the patience of both editor and typesetter, there is room for a few *marginalia* which may relieve future possessors of the volume under review from some perplexities:

Pages 69, 146: For *Fusco*, *Fuscus*, read *Fausto*, *Faustus*.

P. 156: for *il Teatro grande* read *la scena del Teatro grande*.

P. 167: The reference to Magaldi should read: "Atti Accad. Nap." XI (1929-30) parte II, 127-130.

P. 184: Insert *ii* before *vir(um)*.

P. 207: Insert a reference to *Faustus*.

The scope of the volume must have imposed rigid self-restraint in the choice of the material and the preparation of the commentary; we can only admire the sense of proportion here shown, and acknowledge that the result is a well-balanced presentation, which for many new readers will open the gate to a wider and a fascinating field, and for those already somewhat familiar with these texts will clarify ideas and

sum up the present state of knowledge. The temptation on this occasion to expand somewhat the treatment thus accorded must be resisted except in a few cases of special interest.

Many of the texts have already passed through the hands of successive generations of scholars; Dr. Onorato is fully conversant with the various interpretations which have been proposed—especially for the Oscar inscriptions—and his own conclusions are, in general, well-informed and sensible; in the rare instances when they fail to carry conviction, the uncertainty will appear from his own presentation. His mastery of the inscriptions painted upon the wine-, oil-, honey-, and *garum*-jars stands him in good stead, as it appears that several of the candidates for civil office were associated with the forms of industry thus recorded. We hesitate however to accept his suggestion regarding his no. 94 (*CIL* IV 7989 a. c.), that the *sparsiones* there promised as a special feature of the spectacles were possibly cooling sprays of water rather than perfume: the date, *v. iiiii k. mart.*, appears less suitable for the former than for the latter.

At several points, Dr. Onorato's judicious treatment of the evidence results in settling problems which had long remained in a state of flux, e.g. p. 130, on his no. 42 (*CIL* X 794, *ILS* 5538), it is no longer necessary to assign this marble inscription commemorating the construction of some porticos by a *V.* Popidius, a *quaestor*, to the pre-Roman period; the continuance of the *quaestorship* for at least a certain time after the coming of the Romans—perhaps before the establishment of the *colonia*—is attested by *CIL* IV 29.30. 36. Again, no. 39, pp. 128-129, his reasons for not assigning the Samnite *palaestra* to the *iuvenes* but to the whole body of the local soldiery will carry conviction. (These matters had already been treated by him in *RendNap* 26 [1951] 116-124, 136, and *RendLinc* 6 [1951] 260-262.)

No. 24, pp. 122, 123: We interpret differently the evidence for the fortunes of the Caecili Iucundi. The banking activities of the family, so far as appears, were founded by the grandfather, L(?). Caecilius Felix, a freedman; his son, L. Caecilius Iucundus, who carried further these lucrative undertakings, kept in his ingratiating *cognomen* a less obvious trace of servile origin, and remained aloof from local politics; his two sons however, Quintus and Sextus (*CIL* IV 3433), though still retaining the by now familiar *cognomen*, ventured to lend their support to a candidate, and thus would appear to be on the verge of themselves entering the political arena; it is suggestive in this connection that the archives of the house, as preserved, terminate a few days before the earthquake of February, A.D. 62. This branch of the Caecili may have retired from active business, and in any case they show a progress which was doubtless characteristic of many new families throughout the empire during the first century of our era.

Few groups of Pompeian *graffiti* and *dipinti* have been so much discussed, and have so repeatedly attracted the attention of the wider public, as those

mentioning a theatrical personage named Paris; partly for the interest always aroused by a reference to people of the theater, and partly because our literary sources (*PW*, s.v. *Paris* 2, 3) mention two such pantomimic actors, one who died in A.D. 67 and another who died in about 83—both of them in tragic circumstances. (For conditions at Pompeii, the crucial years are that of the great earthquake, A.D. 62, and that of the eruption of Vesuvius, A.D. 79.) Onorato was faced with this problem of identification in publishing, as his no. 108, the electoral *programma*, *CIL* IV 7919, which was painted in large letters on a wall-surface beside the *Via dell' Abbondanza*: *C. Cuspius Pansam aed. o(ro) v(os) f(aciat)is*, *Purpurio cum Paridianis*: in his commentary, he concludes that since this *programma* advocates the candidacy for the office of *aedile* of a member of the youngest generation of a distinguished family, and is thus dated in the very latest period of the life of the community (Della Corte, in *CIL* IV *loc.cit.*, had written: *titulus integrissimus certe Pompeiorum ultimis temporibus adscribendus est*), it appears to date the appearances of the Paris whose admirers, the Paridiani, are associated in the appeal to the electorate, to that late period—after the death of the earlier Paris—and hence serves as evidence that the Paris of some at least of the inscriptions is the younger bearer of the name.

Della Corte, in first publishing the *programma* in *NSc* (1912) 285, had stated convincingly some of the reasons for assigning it, and with it the performances of the Paris indicated, to the latest period of the life of Pompeii: he emphasized not only the frequent occurrence of the name of this candidate but the fresh appearance of the *dipinto* when uncovered, and on these grounds he considered the candidacy of this C. Cuspius Pansa to belong to one of the latest electoral campaigns. His further reference to the large number of Pompeian inscriptions in which the name *Paris* occurs with laudatory comment was fully justified (see those listed in the *Indices to CIL* IV): *Paris va.* occurs at least five times; *Paris v.* twice; *Paris va. fel.* once; *va. Paris* once; *calos Paris* alone once; *isse* occurs with the name three (or four) times; in two of these, with an abbreviated *vale*; while another of them begins with *[Cal]os*. Besides, some at least of these instances, like Onorato's no. 108, occur on the surfaces of walls which had been constructed or restuccoed during the latest phase of Pompeii—after the death of the earlier Paris.

As was to be expected, however, in view of the prominence of both bearers of this name in the literary sources, the question of identity has become the subject of considerable discussion. Sogliano in particular, in his famous article in the *Atti* of the Accademia Pontaniana for 1908, pronounced himself in favor of the earlier Paris; *PIR*, 2d ed., Domitius 156, addenda, judges the attribution to the later Paris *incertum*. Quite recently, Dr. Lawrence Richardson, in the course of his detailed study of the *Casa dei Dioscuri* (*MAAR* 23 [1955]), was led by the presence at the main entrance to that mansion of the *graffito*,

CIL IV 1294, [*Cal]os Paris isse / [S]eptentrio*, to consider the matter and to prefer the earlier Paris. (We would exclude from the discussion *CIL* IV 820 a, which he adduces, but which the editors of *CIL*, rightly in our opinion, understood as [*Iudiciis --- Cae]sar]is Augusti felicit[er] or the like.) Richardson's suggestion was certainly well founded, that the GRO beneath PARIS in *CIL* IV 3866 is to be completed as referring to one or both of the Grosphi who were duoviri in A.D. 59. This *dipinto* however belongs with two others which occur in an environment quite apart from the rest and with earlier associations—on the wall surfaces of a tomb standing beside the highway which led towards Nuceria; beside it on the front of the monument was the famous acclamation no. 3867 (*ILS* 5181 a), *Paris unio scaenae ---*, and around the corner but not far distant no. 3877, [*S]caen[ae] domine / v[a]le*. It appears reasonable to regard this self-contained group of acclamations as referring to the earlier Paris, and to assume that most or all of the other occurrences of the name refer to the later artist, who lived on well into the principate of Domitian.*

It appears quite possible that the name *Paris* may recur more than a few times in the epigraphical repertory as a result of the present extensive campaign of excavation. This, however, can hardly be expected to affect the validity of the above conclusion, based as it is upon a considerable number of instances and upon objective evidence.

Among the few matters in regard to which we should be inclined to question Dr. Onorato's interpretation is that of the connotation of *iuvenis* in the electoral propaganda: is it really the equivalent of *adulescens* or *adulescentulus*, meaning "a young man of promise, on the threshold of his magisterial career" (pp. 172, 177, 180, 185, 186)? And even granting this, can we not see in the term at the same time an appeal to the members of the body of *Iuvenes Pompeiani*—as was proposed by Della Corte in his *Juventus* (pp. 23-29)? The two significations are, of course, not mutually exclusive, but Della Corte's list includes ten candidates, not for the aedileship but for the higher office of duovir, a more advanced stage of the magisterial career.

In conclusion: readers of a literary bent will perhaps pardon our lingering for a moment over a couple of matters bordering upon their field, which emerge among the painted wall-inscriptions. Horace does not seem to have been much read at Pompeii; but some light may be thrown on his art, or at least on its general setting, by two of the *programmata*:

CIL IV 7065, 7066 (Onorato, p. 191):

*Aedilem Proculam (for -lum) cunctorum turba probavit:
hoc pudor ingenuus postulat et pietas.*

This shows the same alliterative tendency or device as was suggested to the poet by the initial *p* of *pudor* in *Serm.* 1.6.57: *infans namque pudor prohibebat plura profari.*

The poet does in fact on several occasions make use of this device: twice again with *pudor*, *Epist.* 2.1.80f: *clament periisse pudorem / cuncti paene patres; A.P.* 135: *unde pedem proferre pudor vetet--*; and most effectively in the solemn passage, *Carm.* 1.4.13: *pallida Mors aequo pulsat pede pauperum tabernas ---*.

(On "p-alliteration" see E. Fraenkel, *Horace*, 104, note 2; and on its occurrence in the Attic dramatists, Fraenkel's note on *Aeschylus*, *Ag.*, 268, in his edition.)

CIL IV 6668 (Onorato, p. 172): *--- utilem iuvenem probum.* To the same—at first sight prosaic—word of recommendation for public service, *Horatii curiosa felicitas* had accorded a setting in the passages *Carm.* 1.12.41-43:

*hunc et incomptis Curium capillis
utilem bello tulit et Camillum
saeva paupertas ---*

and *Epist.* 2.1.124: *Militiae quamquam piger et malus,
utilis urbi.*

Utilis is essentially, in such context, a dignified adjective: and its dignity is maintained in *Epist.* 1.16, 14, in the commendation of the *fons etiam rivo dare nomen idoneus*—,

infirno capiti fluit utilis, utilis alvo.

Horace's *felicitas* consists in the choice of the word and in the setting accorded it.

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LE RELIEF CULTUEL GRÉCO-ROMAIN. CONTRIBUTION
A L'HISTOIRE DE L'ART DE L'EMPIRE ROMAIN
(Bibliothèque des écoles françaises d'Athènes et de Rome, Fascicule 183), by Ernest Will. Pp. 492, pls. 5, figs. 82, map 1. E. De Boccard, Paris, 1955.

This competent and useful study of a group of mystery cults was presented as a thesis to the Faculté des Lettres of the University of Paris in 1953. The subject is limited to the several mysteries—the Thracian and Danubian Cavaliers, Jupiter Dolichenus, Sabazios, Mèn, and Mithra—the cult image of which took the form of a relief rather than a statue. The limitation is not purely arbitrary; for this common characteristic is significantly related to the concept of the deity. Since Mithra, for example, was conceived as a Rédeemer, as god in action for man, the cult "image" was appropriately the representation of an action, better suited to relief or painting than to sculpture in the round.

The author's aim was to try a new approach to this group of cults, through the history of art rather than through the history of religion. The approach proves to be rewarding. The reliefs provide evidence that the cults were formulated as mysteries in the Hellenistic age, in terms of Hellenistic art. In content they were

Oriental but, with the exception of the cult of Jupiter Dolichenus, they underwent what the author calls "interpretatio Graeca" and were expressed visually in terms wholly Greek. The curious unnaturalistic iconography of Jupiter Dolichenus, by which the god was shown standing on the neck of a bull, is taken as evidence that in this instance the cult image was at least partially fixed in Oriental form before it encountered Greek modes of artistic expression, and consequently the *interpretatio Graeca* was a translation rather than an original Hellenistic creation. The Greek expression of a similar idea is to be found in the *tauroktonos* relief of Mithra.

In his treatment of Mithraism, Will departs from the previous view that the mystery was widespread in Asia Minor, developed in a region that had been vigorously Iranized by the Achaemenides. He finds throughout Asia Minor traces of the Iranian Mithra but not of the mystery, which he suggests was a purely local development until it encountered the Roman armies of Pompey and thereby entered upon its world career.

While the cult reliefs are considered primarily as religious documents, such a study inevitably makes its contribution also to the history of art. Apart from the tracing of the types, which the author finds in every case derived, in the Hellenistic period, from Greek models already popularized and often familiar in various adaptations, the discussion of greatest significance for the history of art concerns the controversial subject of frontality. Here the author proposes to reverse the widespread view that the frontality which permeates Roman art from the time of Septimius Severus is a sign of Oriental influence. His contention is that frontality, far from being an Orientalization of Western art, was introduced into the art of the Near East by the Roman conquest. While this reviewer is not sufficiently conversant with Oriental art to estimate the adequacy of his selection of Oriental examples, Will makes a good case for his thesis that the representation of frontal or partially frontal figures becomes increasingly common in Greek relief from the fifth century B.C., as increasing depth of relief gradually lessens the distinction between it and sculpture in the round. It is a salutary corrective to loose terminology to point out that the Orientalization of Graeco-Roman art in the later empire consists not in frontality *per se* but in the primitive rigidity of the stiff rows of invariably frontal figures, such as those, for example, which adorn the Severan Arch of Lepcis. The change consists, as the author points out, in loss of freedom in the handling of figures in various poses, of which Western art had first achieved mastery in the fifth century B.C. The development in the direction of frontality, which took place within major art, resulted in the gradual loss of that interrelation among the figures which creates the illusion of a "scene." To this reviewer the author seems to err in regarding the loss of interrelation among the figures in a relief as intrinsic to the use of frontal pose: "c'est là une conception contraire à sens dramatique de l'action illu-

strée et inconciliable avec un représentation illusionniste stricte" (p. 242). (It should be noted that the author uses the term "illusionistic" to distinguish the naturalism of Greek and Graeco-Roman art from the unrealistic formalism of Oriental art, disregarding its more specific application to Roman relief of the early empire.) Will's statement seems to ignore the fact that an "illusionistic" relief has depth as well as extension, and that frontal or partially frontal placing of figures is one of the chief resources for achieving tri-dimensional effect. The two aims of the artist, "faire voir" and "faire comprendre" (p. 242), are not necessarily mutually exclusive. Indeed, the fusion of the two is *par excellence* the characteristic of illusionistic relief. It is only when the first of these aims is sacrificed to the second that relief moves away from illusionism.

The book is a welcome and valuable addition to the growing bibliography on the mystery cults, conceived from a new point of view and competently executed. The reader is aided by a good table of contents, analytical index, and bibliography on the various cults discussed. References to monuments are based, in the case of Mithraism, on the catalogues of Cumont and Saxl, and thus the book needs to be used with the aid of those works. Line drawings of many of the reliefs serve to clarify the discussion but can give little idea of the actual quality of the monuments. More photographic reproductions would greatly enhance the attractiveness of the book, but would of course have added enormously, and perhaps prohibitively, to its cost.

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FOUILLES DE SAINT-BLAISE (Bouches-du-Rhône), by *Henri Rolland*. Gallia, Supplément III, pp. 290, figs. 186, folding plans 2, 1951. Supplément VII, pp. 89, figs. 56, folding plans 4, 1956. Fouilles et Monuments archéologiques en France métropolitaine. Ministère de l'Education nationale. Centre national de la Recherche scientifique. Paris.

M. Rolland is an eminent Provençal archaeologist, already well known for his excavations at Glanum by Saint-Rémy-de-Provence, which revolutionized our conceptions of *Gallia Graeca*. The work he has done at Saint-Blaise is of no less importance, and of interest alike to proto-historians, to Hellenists and to students of late-Roman Gaul. The site lies on a hill south of Istres and northwest of Martigues, dominating the Étang de Lavalduc on the west and the Étang de Cîteis on the northeast. The hill takes its name from the chapel of Saint-Blaise at its northern end. In the early Middle Ages the settlement was known as Ugium, while still earlier it may well have been the Mastramelle of the ancient geographers. Lying as it does between the eastern end of the Rhône delta and the Étang de Berre, on an important route leading to

Glanum, it must have had some importance as an outpost of the city of Massalia, whether occupied by Massaliotes or by natives under Massaliote control.

Excavation at Saint-Blaise began in 1935 and has continued, with a break during the war, until the present day. M. Rolland divides the history of the site into four main periods:

(1) *Seventh to early fourth centuries B.C.* The pottery found includes sherds of Rhodian and Rhod-Ionian wares, grey pottery from Asia Minor, some Protocorinthian and Attic black-figure wares, and also *bucchero nero* and native sherds. At some time the oppidum was fortified by a wall of massive stones, roughly trimmed (described in *Supplément VII*). The wall and the native pottery recall those of the oppidum of Cessero (*Gallia*, vol. II). The Greek pottery, some of which underlies the wall of period 2, is described in some detail, but we must deeply regret the "mesure d'économie" which forced M. Rolland to cut out of the report a chapter which he had written on the native pottery. He refers us to the publication of some of it in the *Actes du Congrès international d'Études Ligures* (1950), Bordighera 1952. This paper is not readily come by and more detailed description and illustration of the local Saint-Blaise pottery of periods 1 and 2, associated with dated Greek and Italian wares, would be of inestimable value. It is not too late to hope for this, however, as the work on the site continues, and we can look forward to more of M. Rolland's *Suppléments*.

A puzzling factor has been the discovery of over forty round-headed stelae resembling certain stelae found at Roquepertuse and elsewhere. They are probably votive rather than funerary, but those found had nearly all been re-used in the building of the Greek wall of period 2, and none of them have been found *in situ*, so they cannot yet be dated.

(2) *Fourth to first centuries B.C.*, marked by some Greek and much Campanian ware. This is the period of Massaliote ascendancy. M. Rolland's greatest triumph has been the discovery of the town wall he ascribes to the 4th century, which was clearly constructed by men who understood all about the current art of fortification. The wall and its gateways are minutely described. It was built of finely-dressed stones, carefully laid without mortar, and considerable stretches of its lower part remain. M. Rolland believes that the Greek or Greek-trained masons were brought from Sicily, where a number of important town walls date from the same period. The town, some of the houses of which are now being unearthed, and its walls, were destroyed in a siege at the same time that Massalia fell to the Caesarean forces.

(3) *First to fifth centuries A.D.* A period of abandonment.

(4) *Fifth to seventh centuries A.D.* Reoccupation and refortification of the site under the pressure of the barbarian invasions. The village of Ugium grew up around a church within the new ramparts. This early church had its pulpit set in the centre of the nave, in front of the apse, in the manner of churches in

Syria and North Africa. Large quantities of late-Roman and Visigothic pottery have been found, including a number of the decorated red oval lamps which are characteristic of late-Roman sites. There is a 29-page section in *Supplément III* devoted to this pottery.

Finally, the 12th century chapel of Saint-Blaise is discussed, and the two small churches or chapels, of the fifth-sixth and tenth centuries respectively, which preceded it at the north end of the hill.

OLWEN BROGAN

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EPONA, DÉESSE GAULOISE DES CHEVAUX, PROTECTORICE DES CAVALIERS, by René Magnen. Inventaire des monuments par Émile Thevenot. Pp. 71, pls. 66. (With 2-page "Inventaire supplémentaire" issued in 1956.) Bordeaux, Éditions Delmas, 1953.

Our understanding of Epona, the sole Celtic divinity ultimately worshipped in Rome itself, has been much expanded in recent years through the researches of F. Benoit, P. Lambrechts, E. Thevenot and others. Once the simple patron goddess of the stable, her domain is now seen to include a comprehensive sphere of agricultural fertility, economic prosperity and potent funerary symbolism. Her affinity with the *Matres* or parallels with the "cavalier à l'anguipède" have been explored, as well as relationships with the cult of springs and fountains.

The present useful and attractive little book was not intended to provide new theories of interpretation or even to summarize the literature of the subject. M. René Magnen, writer, horseman and cavalry *aficionado*, wished to introduce the general public to the intriguing character of Epona, at the same time hoping to offer iconographic inspiration to modern painters, sculptors and ceramists. To this end he has supplied an enthusiastic essay of some twenty-two pages, together with a generous selection of plates.

To this volume of inimitable French gracility and no scholarly pretension is joined the supplementary contribution of M. Thevenot, comprising bibliographical notices and an inventory of all monuments relative to the worship of Epona—from dedicatory inscriptions and representations of the goddess to sculptures of dubious connection (such as the *domador de caballos* of Iberia). It is this catalogue of 268 entries which readers of this journal should find of particular value, since it brings our knowledge of Epona up to date in most condensed and objective form. It is accompanied by a table of the distribution of monuments according to country (plus a map of western European sites), a number of statistical summaries relating to interpretation of the goddess, and a geographical index of provenances.

Thanks to the dual character of this book directed in part to the layman and in part to the specialist, the

photographic reproductions, the typography, even the paper, are of much higher quality than usually associated with minor archaeological publications in France.

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EGITÂNIA, by *D. Fernando de Almeida*. Faculdade de Letras da Universidade de Lisboa Publicação No. 2. Pp. 445, pls. Lisbon, 1956.

This is the publication, based on a doctoral thesis, of the antiquities, especially the inscriptions, of a tiny, almost deserted Portuguese village, Idanha-a-Velha (Roman Civitas Igaeditanorum, medieval Egitânia) in the mineral-rich country (inscr. no. 7 gives thanks to Jupiter "ob reperta auri pondo CXX") north of the Tagus, not far from the Spanish border bridge of Alcântara, to the construction of which Idanha contributed in A.D. 105. Here are published, from the village and its environs, over 200 inscriptions, fifty-five of them for the first time; of the total, seventy are illustrated. Though the content is routine (dedications to gods, emperors, functionaries civil and military; a single cursus [no. 21]; milestones; and—the largest category—funerary inscriptions, mostly undated, but ranging from 16 B.C. to Visigothic times), the collection has a twofold interest: (1) it is the largest single collection of inscriptions from Lusitania, Lisbon itself boasting no more than 148; (2) of the names of persons and divinities recorded on stone a significant number is Celtic; the stones give evidence of the steady Romanization of the province, as well as of the predominantly Celtic stock of the people who lived between Tagus and Douro, if not of all Lusitania, in Roman times.

The book is divided into two parts, preceded by an introduction in French, which is in fact a summary, by Scarlat Lambriño. The first part (pp. 13-120) is an account, discursive but redeemed by its enthusiasm, of Idanha's history and archaeology. Excavation results are unpublished, but apparently no attempt has been made to date existing pottery, or to use pottery in context (e.g., in the rubble fill between the two faces of the town wall) to date the Roman remains. But de A. has studied the topography, traced the triple-gated, rusticated, ashlar, granite walls, the cardo and the decumanus, and supplied air-photographs (figs. 30-32) and a plan (fig. 5). He has made soundings in the local cathedral, now in ruins, the oldest religious building in Portugal, containing much Roman material in re-use. Its ground-plan (fig. 10) looks very like that of Roman secular basilicas at Alba Fucens, Ardea, and Cosa. Idanha suffered no less than five Arab invasions, the first in 713 or 715. De A. has studied the footings of the castle of the Knights Templar (who, having wrested Idanha from the infidel, were given it as a fief, which they held from 1165 to 1310) and concluded, quite reasonably (fig. 50), that the castle's lower courses are those of a building on what was once

the Roman arx. Of less interest to readers of *AJA* will be a list of Idanha's bishops, A.D. 569-693 (p. 48) and of Grand Masters of the order of Christ (pp. 85-86), who succeeded the Templars in Idanha.

The second part (pp. 123-361) is a catalogue of the inscriptions, of 29 Visigothic coins from Idanha's mint (flourished ca. A.D. 586-711) and 32 documents, mostly deeds and charters, illustrating Idanha's history from the twelfth to the nineteenth century. Bibliography and indexes close the work.

The inscriptions will be the centre of the classical archaeologist's interest in this book. They are preceded by a list, culled from them, of over ninety Celtic nomina. In inscr. no. 46, the father's nomen and praenomen are Celtic, but the son calls himself Flaccus; no. 82 records four generations of a Celtic family, the first two with Romanized names (Tongius, Cilura), the last two with Roman (Varus, Gracilis); in no. 115 the father has a Celtic name, the mother is a Crassus' daughter, the son calls himself Marcus. All this illustrates slow, progressive Romanization. No photographs, unfortunately, are supplied to help us date these stones, and no. 115 is lost. Letter-styles are a notoriously shaky criterion for dating, especially when the stones come from a backward province and are carved, as these are, on as obdurate a material as granite. But for what it is worth, letter-styles date Idanha's *floruit* in the first century A.D. The best lettering, which in Rome would be Trajanic (fig. 134) is found on no. 76 (= *CIL* 2,442), which happens to be on marble. No. 93, which mentions a gilded statue, seems to be in a good hand, though the photograph (fig. 141) is poor. Seven stones yield Greek names (listed, p. 31); of the seven, four are illustrated, one with a false reference (see errata, p. 452). Of these, no. 103 (= *CIL* 2,445), mentioning one M. Lucretius Onesimus, is inscribed in good letters (fig. 146), and might be second century A.D.; the rest are crude, full of ligatures, and probably late. Stones firmly dated like no. 1 (16 B.C.) and no. 2 (A.D. 1-4), both on granite, naturally show much cruder lettering than stones of the same date on marble in Rome (contrast, e.g., de A., fig. 105 [no. 1] with Diehl pp. 9-10, the *ludi saeculares* inscription), or on limestone in Tripolitania (contrast de A., fig. 106 [no. 2] with J. M. Reynolds-J. B. Ward Perkins, *Inscr. of Roman Tripolitania*, pl. v, 1). It may be useful to list the stones already published in *CIL* 2 of which de A. provides photographs. Besides the two mentioned above, de A. no. 23, fig. 113 = *CIL* 2,437; no. 32, fig. 119 = 439; no. 92, fig. 140 (from a cast) = 444; no. 104, fig. 147 = 446; no. 108, fig. 149 = 448; and no. 137, fig. 159 = 450. The photographs are not equipped with cross-references to the catalogue-numbers of the inscriptions, which is a nuisance.

It is good to see epigraphy being carried on so enthusiastically in Portugal; under methodical direction it should yield good results. Let us hope that de A. will soon publish the results of systematic excavation on this promising site.

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STUDIEN ZU ARCHITEKTUR KONSTANTINOPELS IM 5 UND 6 JAHRHUNDERT NACH CHRISTUS, by *Friedrich Wilhelm Deichmann*. Heft 4, Deutsche Beiträge zur Altertumswissenschaft. Pp. 117, pls. 32. Bruno Grimm, Baden-Baden, 1956.

This modestly presented study, the outgrowth of a trip to Istanbul and Asia Minor in 1952, is essentially an attempt to extinguish the long drawn-out "Orient oder Rom" controversy by a sort of compromise, in which concessions are made to the warring parties and their conflicts resolved by assigning a unique creative role to the capital itself. The author believes it is historically beside the mark to assume that factors of source and origin, which are often chronologically remote, and others of influences acting contemporaneously, in fact determine the style or works of a period. He thinks it more important by far to recognize the multiplicity of the creative process and its unique moment of climax. Hence his thesis is based essentially on recent structural discoveries in Hagia Sophia and on his personal analyses of techniques of building and carved ornament in western Asia Minor, Constantinople, Greece and Italy from the second to the sixth century. Although his conclusions on many points will be questioned, his handling of the issues involved can only be hailed with approval, the more so since his aim is to clarify the historical process of technical and stylistic development which culminated in the reign of Justinian. He thus begins with building techniques, considers briefly the problem of the dosseret, presents a major discussion of architectural ornament, and concludes with a summary treatment of space composition and proportions.

Investigations by Muzafer Ramazanoglu (1953) have shown that in Hagia Sophia all interior piers and pier-responds, in addition to the four great piers of the dome as described by Procopius, are of squared ashlar stone. This contrasts with its wall technique of alternate layers of brickwork and single leveling courses of ashlar blocks—also with the arches and vaults which are throughout of brick, the arches often formed of triple ranges of voussoirs. A close analogy appears in the Harbor Baths at Ephesus (probably late second century), which likewise have ashlar piers to carry arches and vaults of bricks radially laid. Here also the arches have three concentric ranges of voussoirs, a form which, according to Deichmann, is very rare in Rome but later common in western Asia Minor. He therefore cites this building as an immediate prototype of pier and vault construction in Hagia Sophia. Although granting that Roman forms of vaulting and Western techniques of building in reinforced concrete had spread throughout the empire in the first century of our era, he thinks it clear that East and West had developed separate and different building traditions in the late pagan centuries and that the techniques of Constantinople derive from those of Anatolia, even though the latter are, he admits, based on Western Roman traditions. Thus, building at the capital, unit-

ing East with West, itself developed autonomously to produce the Proto-Byzantine style. Pressing this concept to its limits, the author cites the functionally-ribbed second dome of Hagia Sophia as a distinctive local development, contrasting it with the embedded-rib technique of the dome of the Pantheon; on the other hand he denies that the ribbed dome of the Temple of Portumnus at Porto could have served as an immediate prototype. To justify this opinion he asserts that the ribs of the latter are esthetic rather than genuine structural elements. Deichmann thus concludes that in Justinian's Constantinople there appear surpassing developments in building and vaulting techniques, and that these are based on their own particular traditions. They hence do not represent the culmination of much older and simpler Roman methods. Yet the more than dubious ground for such conclusions is revealed by the author's admission that his data are too superficial and incomplete to yield precise and comprehensive results, particularly as regards the relationship of western Asia Minor to Rome in the early imperial period.

In discussing the problem of the dosseret, Deichmann notes that Weigand distinguished two forms of different origin: one derived from the Roman entablature block, the other (the "true dosseret") of uncertain origin. Though the first type appears above the coupled columns of Sta. Costanza, he discounts it because it is unlike the later "true dosseret"; and he likewise rejects the rudimentary "true dosserets" which appear in S. Giorgio Maggiore at Naples, on the ground that the date usually assigned to them, 373, is not firmly established. He decides therefore that, according to our present knowledge of the monuments, the earliest examples of the dosseret occur in Greece, the Islands, St. Menas (Alexandria), Rome and Ravenna, and that this distribution points to a general center of origin which can only have been in the East Roman area. Thus the theory of a West Roman origin, as argued by Zaloziecky and the present writer, is no longer tenable. As to the impost capital, properly so-called, Deichmann considers it a characteristic creation of Constantinople, first appearing in Sts. Sergius and Bacchus after 527.

In the restricted limits of this review it is obviously impossible even to summarize the many points raised by the author in support of his theory that the magnificent carved ornament of Hagia Sophia represents the climax of an artistic evolution which began in Constantinople and culminated in the imperial workshops of Justinian. It must suffice, therefore, to touch briefly upon a very few. Beginning with the earliest safely dated architectural ornament of New Rome, that of the portico of the Theodosian Hagia Sophia (415), and noting that its repertoire of forms derives almost exclusively from western Asia Minor, he remarks that its style is distinguished from sixth century ornament by comparative flatness, by the lack of a strong drill technique and, consequently, by a relative lack of shadow. Thenceforward, however, coloristic techniques develop steadily, as seen, for example, in the capitals

and frieze of St. John of the Studium (463), where undercutting first appears to enhance the effect of shadow. The next step is taken in Sts. Sergius and Bacchus and the climax is attained in Hagia Sophia; here, in place of a plastic handling, there reigns a pierced all-over surface ornament, freed from its background and determined by dazzling contrasts of light and shade. The inception of this coloristic trend—and its realization by means of a drilled technique—is placed in western Asia Minor; it is seen most clearly in the Sidamara sarcophagi and also in major works at Ephesus of the second and third centuries, and from there it was transferred to Constantinople to realize its consistent and autonomous development.

To support the theory of western Anatolia as the ultimate source of coloristic aims and techniques, Deichmann naturally combats the arguments elsewhere advanced by this reviewer to demonstrate the origin of colorism in Flavian ornament at Rome. Although he admits that the technique in each case differs only very slightly, he maintains that the analogy leads to a false conclusion because the Flavian style did not persist; and, although undoubted features of it reappeared under Septimius Severus, the ornament as a whole has an entirely different quality. This is because the "new" style complicates the ornamental motifs, dissolving independent elements in an all-over network of light and shade. In defending this position the author entirely disregards the close stylistic contacts established by the writer between Flavian ornament in Rome and that of the façade of the Library at Ephesus (ca. 115-145); and he also fails to mention that the latter stands as the accepted source of the ornamental motifs and drill technique taken over and further elaborated in the workshops which produced the Asiatic sarcophagi. Furthermore, since Deichmann maintains that Constantinople itself was the creative center of the coloristic style and technique which bloomed in the sixth century, it follows naturally that the style must have radiated from the capital outward to the provinces. Hence Zeloziecky's contention, that it not only originated in the West but also attained there its finest and most advanced expression at Ravenna and Parenzo, must somehow be countered; this is accomplished by charging Zeloziecky with falsely assuming that the Western masterpieces were done by local Western workmen. They were, of course, imports from the workshops of the capital, and their admitted superiority over similar pieces in Hagia Sophia is easily explained by assigning them to a later date, in this case 540-50.

Deichmann's final chapter is designed to show that, in space composition as in all other aspects, a unique and distinctive style grew up in Byzantium. Although accepting, in general, Weigand's ideas of "Western verticality" vs. "Eastern horizontality," he maintains that no such principle applies to space composition or proportions; nor does the antithesis between Eastern design, of closed, compact building masses (as in Hagia Sophia and Sts. Sergius and Bacchus), vs. Western illusionistic dematerialization (as in S. Vitale),

possess any real objective basis. This is shown, for example, in two contemporaneous buildings: Sant' Angelo, Perugia, is broad and low, whereas the Syrian Kasr ibn Wardan has unusually lofty proportions. Thus the antithesis, Western vertical vs. Eastern horizontal, cannot be applied to spatial forms and spatial proportions. Yet these churches are almost contemporaries of Sts. Sergius and Bacchus and of S. Vitale, which are always cited in a contrast of Eastern and Western principles; and S. Vitale itself is *less* vertically proportioned than Kasr ibn Wardan, whereas Sts. Sergius and Bacchus is *more so* than Sant' Angelo. It therefore follows that, in the development of interior space, the hitherto generally accepted antithesis is not binding: Sts. Sergius and Bacchus actually stands between the two extremes of markedly vertical and markedly flat proportions. This conclusion serves the author as starting-point for his own theory, the development of a unique and distinctive "Raumharmonie" in the great churches of the capital—an evolution consummated in the unified and beautifully balanced spatial elements of Hagia Sophia which, by a sort of gradual intensification, build up to the climax of the magnificent dome.

Because of its factual approach, keen insights and generally moderate tone, Deichmann's book is sure to be welcomed by all lovers of Byzantine architecture.

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MEDIAEVAL ARCHITECTURE IN THE CENTRAL AREA OF CORINTH, by Robert L. Scranton. Corinth, Results of Excavations Conducted by the American School of Classical Studies at Athens, Vol. XVI. Pp. 147, pls. 36, plans 7, figs. in text 15. Princeton, N.J., 1957.

Because the little group of scholars who began excavations at Corinth in 1896 had slight regard for mediaeval matters, while those of us who followed during the next three decades worked unaided by modern methods of recording the mediaeval hodge-podge through which we dug, the task which faced the author of this latest work on Corinth was indeed of staggering proportions. But that Mr. Scranton has met it superbly cannot be questioned. From the chaotic mass of excavation material—surviving walls and architectural fragments, coins, notebooks, reports and inventories going back through sixty years—he has sketched a fascinating picture of the mediaeval town, plucking gems from what a dyed-in-the-wool classicist once defined as "Byzantine filth," reconstructing the architectural history of the central area through the long decline of the Christian centuries, and making finally an important contribution to our knowledge of Byzantine domestic architecture. Thus the present volume will be studied closely by the mediaeval brotherhood; and it will assuredly be read with joy by every

surviving member of that goodly company who had a hand in the Corinth dig.

In "Part I, Architectural Development," the author follows a chronological scheme, discussing consecutively the Early Christian Period (395-610), the Age of Barbarism (610-802), the Byzantine Recovery (802-1057), the Full Byzantine (1059-1210), the Frankish (1210-1458) and the Turkish (1458-1858) periods. Most interesting here is his hypothesis—entirely acceptable to this reviewer—that the Julian Basilica was remodeled to serve as the Constantinian metropolitan church of Corinth and that the Southeast Building adjoining it became the episcopal palace, to survive through the tenth century. Other highpoints of interpretation and reconstruction appear in his treatment of the Bema Church, the "Governor's Palace," the Byzantine Inn, the Monastery and Church of St. John Theologos. "Part II, Architectural Analysis," presents a scholarly discussion of structural techniques and carved ornament, well organized, nicely illustrated, and thoroughly documented for comparison and dating. Most significant is the final chapter on Plans and Types of Buildings. Here Mr. Scranton identifies three kinds of shop: the shop building (occasionally fronted by a loggia), the "specialty shop" (outlet of a large industrial operation), and the small retail establishment. Civic structures, unfortunately, cannot be positively identified, while religious monuments have little to offer from the analytical viewpoint. But Corinth does enhance our understanding of the Byzantine dwelling, of which a number of examples (sixth to twelfth century) show a main room of long, quadrilateral plan. Here the length is divided into two approximately equal areas by a transverse screen of an arch on wall-pilasters, or of two or three arches on intermediate columns, producing a layout which may be taken as an adaptation of the typical structural form of Early Christian houses in Syria, where the room was known as a "triklinon."

This volume, conforming in every way to the high standard of its series, concludes with an appendix on Graffiti and another on "Sigma Tables," three interesting specimens of which were found at Corinth.

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THE TRIUMVIRI MONETALES AND THE STRUCTURE OF THE COINAGE OF THE ROMAN REPUBLIC, by Karl Pink. American Numismatic Society's Numismatic Studies, No. 7. New York, 1952. Pp. 78. \$4.

It has always been a matter of some difficulty for students of the Roman Republic to make use of the evidence of the coinage. The material itself is so vast and for many years the only scientific publication of the complete series was Grueber's catalogue of the British Museum Collection, an extensive work of great detail and not particularly suited for quick reference

by the non-specialist. Sydenham's *Coinage of the Roman Republic*, published a few years ago, does, of course, present the coin material in a form which can be consulted with relative ease but the work now under review was written a good many years before Sydenham's volume appeared, though by a series of unhappy chances it was not published till the same year. The object of Dr. Pink's work, however, was an analysis of the Republican series and its presentation in such a way that, for the first time, one would be able to see the wood despite the trees.

For this task Dr. Pink is uniquely qualified. He comes of a long tradition of numismatists in Vienna whose studies have been directed to the recovery of the ground plan, as it were, of the imperial issues and to the production of an ordered body of evidence of which use can be made. Dr. Pink himself, carrying forward the work sketched out initially by Otto Voetter, published between 1933 and 1936 the outline arrangement of the coinage between A.D. 193 and 253, and here he turns his attention to the superficially inchoate mass of the "moneymen's" coinage of the Republic.

The introductory section reviews the criteria by which earlier arrangements of this coinage have been attempted. These criteria are largely rejected: the identification of names known in history and also appearing on coins is dangerous without supporting evidence; metrological data, particularly for *aes*, in an *al marco* coinage, such as this, is unreliable; the development of types is a useful guide but style as a criterion must always be suspect as subjective and variable. Pink has been accused of denying that finds are important but all he does is to utter a wise caution against the blind acceptance of a terminus date for a hoard, determined only by one of the suspect criteria just mentioned, and against a too ready reliance on the *ex silentio argument*. An even more radical simplification of the material is the jettisoning of the "Italian" mints of the arrangements both by Grueber and Sydenham; for Pink argues that both on grounds of constitution and of style there was only one mint—at Rome. While a proliferation of mints based on variation of style only is a sheer embroidery, Pink's concept of Rome as the sole mint at all times is too drastic a simplification to allow for all the exigencies of historical circumstances.

As ever the main difficulty in the arrangement of this series remains the establishment of the date of the introduction of the denarius. Pink, accepting in general the theory of Mattingly and Robinson, revises upwards the date of the denarius to the end of the second Punic War, about 210 B.C., basing his argument largely on the parallelism between the development of moneymen's symbols, monograms and their names on the denarius coinage and on the "New Style" tetradrachms of Athens, the beginning of which he puts about 229 B.C. Miss Thompson, however, has recently argued convincingly (*ANSMN* 5 [1952] 25) that this series begins about 196 B.C., that is, quite close to the Mattingly-Robinson date for the denarius.

Having cleared the ground, Pink goes on to form the coinage into a series of successive issues each of which is the output of a college of the *tresviri monetales*. He determines the grouping of these colleges by criteria such as the identity of pattern of denominations as well as of series marks, and the parallel development of forms of name, supplemented by such secure historical data as is available. Pieces which do not conform to the pattern are dubbed supplementary or special issues. In the imperial coinage the special issue has an accepted place: it is usually commemorative or allusive in type and our historical knowledge of much of the empire is sufficiently detailed to allow of identification of the event to which the special issue is attached. For the Republic we generally lack such knowledge and it is not always clear here what is special about the type of issues so labelled. One can expect a coinage issued by the Romans to be basically a methodical and ordered pattern but the occasional distortion of the pattern is a sign of the correctness of an arrangement rather than something to be removed by whatever the explanation.

The outcome of all of this and its value is that despite rather ruthless pruning—or perhaps because of it, there emerges a readily comprehensible picture of the Republican coinage, presented with a brevity that makes consultation easy. The separate issues are not dated but a bracket date is given for each of the ten groups and the issues are to be taken as spread fairly evenly, in principle as annual issues, particularly in the later groups. The system established is still being subjected to detailed examination: while modifications of detail undoubtedly will require to be made, the general sequence appears to be not far from the truth.

There are, however, two debits to be set against this book. The brevity which renders it easy to consult has been achieved by the use of a considerable quantity of abbreviations and conventions which it is almost impossible for the reader to carry in his head and by the reduction of argument to the point where the reader has to deduce for himself the reasons for a particular arrangement. That the English of the book is difficult and at times scarcely intelligible is the responsibility not of the author but of the publishers, who turned down a competent translation by the foremost scholar in this field in favor of, presumably, a professional translation by someone unfamiliar with the problems and the technical vocabulary.

R. A. G. CARSON

BRITISH MUSEUM

VITA ECONOMICA DI AQUILEIA IN ETÀ ROMANA, by Silvio Panciera. (No. 6 in the series of the Associazione Nazionale per Aquileia). Pp. viii + 136. Aquileia, 1957. Lire 1,000.

In view of the preoccupation of the past half-century with problems of the economics of the Roman empire, the appearance of this volume is very timely. The special significance of Aquileia is due to its command-

ing position at the head of the Adriatic, the starting-point of the land routes to the Danube Basin and the Baltic; it exploited the resources of the neighboring fisheries and a fruitful *hinterland* with its game, horse-raising and cattle-breeding, and especially forestry and minerals, for application in industry and commerce; it became an important road-center and the base of supplies for the armies stationed on the Danube; it was a seat of the administration of customs, *portorium*; it was long known for its wealth; it achieved a place of distinction on the *Tabula Peutingeriana*.

Panciera has arranged his literary, epigraphical and archaeological material with skill, evaluating it in the briefest form: the successive items combine in a coherent whole. And while the book naturally incorporates the results of the labors of predecessors, Brusin and Calderini, Frank and Rostovtzeff in particular, distinct value is imparted to its pages by the recurring indications that its author knows and appreciates the country and its heritage at firsthand.

Panciera has austere limited the range of his survey, and that not only in the geographical sense: thus he has excluded the evidence for practitioners of learned and artistic pursuits; these had been accepted by Calderini, e.g. some *medici*, a *iurisperitus*, even a popular *mima*, as forming part of the economic structure, and in our contemporary society, at least, the economic contribution, in a broad sense, of such skills, though intangible, is still felt to be by no means negligible.

Even when thus restricted, Panciera's field has contacts with subjects of a wider range: pp. 6f, the cults of nature-divinities as evidence for agriculture; 15, the symbolism of the vine and grape; 49-61, the far-reaching road-system with its commercial and military implications; 61-73, the *portorium; passim*, the products in clay, glass and amber.

The "Errata Corrige" may be augmented: p. 16, note 1, line 3, after *aptissima*, insert *et maxime*; p. 20, note 22, line 4, read *tantum*; p. 28, lines 10-11 appear inexact; p. 43, note 121, delete the first reference to Pliny; note 122, change 12 (chapter) to 49 (section); *passim*, the name of the colony on the Rhine was *Colonia Agrippinensis*. P. 20, *loc.cit.*, read *convivatus*.

This brief summary, however, will show how much of interest of a highly varied nature the book contains; and it is indeed a solid contribution to our knowledge of the economic problems of the Roman world.

A. W. VAN BUREN

ROME

AN ARCHAEOLOGICAL AND HISTORICAL GUIDE TO THE PRE-ISLAMIC ANTIQUITIES OF TRIPOLITANIA, by D. E. L. Haynes. Pp. 178, pls. 32, figs. 26. Antiquities Department of Tripolitania, Libya, 1957. £0.200 (20 Piastres).

In 1946 the author, sometime Antiquities Officer of

the British Military Administration of Tripolitania and now Keeper of the Department of Greek and Roman Antiquities in the British Museum, published *Ancient Tripolitania*, a smaller work of lesser scope than the present. *The Antiquities of Tripolitania* is not only an excellently written book covering the two aspects mentioned in the full title but is presented in a handsome, paper-backed format with sculptures and architecture of Severan Lepcis Magna as photographic background for the cover. The book will serve two purposes: those in libraries abroad can consult its chapters on the early history of Tripolitania and its studies of the cities from which the region derives its name, Lepcis Magna, Oea (Tripoli), and Sabratha; those near the sites can use it as a Pausanias with which to walk the monuments themselves.

Too often books of this type suffer from inadequate mechanical aids (contents, lists of plates, indices, explanation of terms) or from lack of maps and plates (or from plates which show comparative material rather than that actually discussed). In this book we are provided with much more than our money's worth, presented in a lucid, businesslike fashion: all of the mechanical features mentioned above, including a Glossary of architectural terms (from abacus to vomitorium and voussoir), and plates which range from the latest aerial photographs to drawings from the early nineteenth century works of Capt. G. F. Lyon and Heinrich Barth. There are large, folding plans of the excavations at Lepcis Magna and Sabratha, large and small maps of Tripolitania, and such interesting drawings in the text as a reconstruction of a typical Tripolitanian olive-press (fig. 17). In several instances a photograph of an excavated area, such as the Forum at Sabratha, is made more useful by parallel illustration of an archaeological reconstruction (e.g. Mr. Alan Sorrell's drawing for *The Illustrated London News*). A chapter "Outlying Sites and Monuments" treats such subjects as Roman Roads, Road Stations, Forts, Farms, Mausolea, Temples, and Christian Churches.

The reviewer misses a few things which undoubtedly could not be included within the limits of size and price; it is almost ungracious to the quality of this guide to mention them. Several paragraphs on the antiquarian history of the area from the "Early Travellers" through the transplanting of part of Lepcis Magna to Windsor Great Park (A.D. 1817) to the excavations of ca. 1925-1955 would have been most welcome. Likewise, a page or two on non-architectural antiquities in the museums of the Emporia (as the three cities were styled) would not have cluttered the book excessively; one remembers the rich harvest of imperial portraits, copies of famous Greek sculptures, and Graeco-Roman cult statuary published, often in a half-excavated state, in *Africa Italiana*. On the other hand, these museums were in the process of being reorganized by Dr. E. Vergara Caffarelli at the time the book was being completed (see *FA* 9 [1954] no. 91 and further refs.). Finally, although the skeleton of a bibliography is found in the acknowledgements on p. 8, a fuller list would have helped; one recalls articles and

reviews in *Africa Italiana*, in *BSR*, in *JRS*, *Quaderni di archeologia della Libia*, et al., but it is hard to remember what has appeared where. We have in addition such divergent scholarly presentations of recent years as K. D. Matthews and A. W. Cook, *Cities in the Sand, Lepcis Magna and Sabratha in Roman Africa* (Philadelphia 1957) and R. A. G. Carson's "The Kingdom of the Vandals," *History Today* (May 1955) 334-340. But since the reviewer confidently predicts many printings for *The Antiquities of Tripolitania*, some of these suggestions could well appear in a future edition.

H. paints a charming, witty picture of the Emporia, amid his careful presentation of history and statistics. His pages on intellectual life in Oea and environs centers around the story of Apuleius of Madaura and his bride, the rich widow Pudentilla. In the so-called *Apolo-gia*, Apuleius answered her relatives' charges that he had used magic to win her fortune; he spoke before his friend the proconsul Claudio Maximus, with "a brilliant display of wit, rhetoric and superficial learning which must have dazzled his provincial audience" (p. 49). The only other intellectual treat recorded for the locals in the great centuries of the Emporia seems to have come "when Apuleius was invited to lecture on Aesculapius in the basilica of Oea and so delighted his audience by his eloquence that they entreated him to stay and become a citizen of the place" (p. 48). H. makes it amply clear that, if a visitor from Severan Rome would have languished intellectually in Tripolitania, he at least would have been dazzled by the architectural contributions of Septimius Severus to his ancestral city of Lepcis Magna.

CORNELIUS VERMEULE
MUSEUM OF FINE ARTS, BOSTON

EIN URNFRIEDHOF DER SPAETEN ROEMISCHEN KAI-SERZEIT IN MECKLENBURG, by Ewald Schuldt. Deutsche Akademie der Wissenschaften zu Berlin, Schriften der Sektion fuer Vor und Fruehgeschichte, Vol. 4, Berlin, 1955.

This doctoral thesis was submitted to the Humboldt-University in (East) Berlin in 1952. In 1938-1939, 1736 graves were excavated so that since the first diggings in 1840 altogether more than 2,000 graves were unearthed. All these graves cover a period of 250 years from A.D. 200-450.

This excavation deserves particular attention because it clarifies in a decisive manner the controversy as to which Germanic tribe this and other similar cemeteries might have belonged. All these sites are located east of the lower Elbe river and in the northwestern part of the provinces of Brandenburg, Mecklenburg and East Holstein.

Paul Quente (d.1914) the founder and untiring pro-motor of the "Heimatmuseum Heiligengrafe," County East Prignitz, had connected the large cemeteries

of Dahlhausen, Kyritz and Kuhbier with the Langobards (Lombards) (PZ 3 [1911]). Unfortunately the whole museum containing the material from these excavations was destroyed by the occupying Russians after the end of hostilities of World War II. These three cemeteries were published by W. Matthes in 1931 after George Girke and George Lechler had prepared the material left by Quente for publication.

Fortunately, enough excellent, comprehensive monographs exist for the two counties, East and West Prignitz, which enable us to compare the inventories of all these different sites (Waltraut Bohm, *Die Vorgeschichte der Westprignitz* [Leipzig 1937]; Walter Matthes, *Urgeschichte des Kreises Ostprignitz* [Leipzig 1929]).

Now, based upon typological series of fibulae from these cremation burials, Schuldt could prove that this cemetery of Pritzker which has so many connections with the sites in that indicated area and the above mentioned sites (then assigned to the Lombards) belong beyond any doubt to the Anglo-Saxon group. The cessation of burials on these sites has therefore to be explained only through the migration to England.

GEORGE LECHLER

WAYNE STATE UNIVERSITY

STUDIES IN ITALIAN MEDIAEVAL HISTORY presented to Miss E. M. Jamison, ed. by Philip Grierson and John Ward Perkins. Papers of the British School at Rome, vol. XXIV. Pp. viii + 220, pls. 30. 1956.

These essays cover an extremely wide range both chronologically and in subject matter. Even the wide field designated in the title, Italian Mediaeval History, does not do full justice to the period covered, as the first essay deals with the fourth century and the last with the sixteenth. Like most successful Festschriften the tie that draws the book together is the personality and interests of the scholar being honored—Miss Evelyn M. Jamison. The fact that there are essays in English, Italian, and French shows the range of her friendship while the many disciplines represented demonstrate the sweep of her interests.

A work of this sort could be adequately reviewed only by a group of specialists. A single reviewer can simply mention the essays which particularly interested him. For this reviewer one of the most fascinating is "The Salentinian Coinage of Gisulf II and Robert Guiscard." This not only gives interesting information on a complicated period in the history of Southern Italy but also supplies an insight into the relationship between numismatics and history.

"The attempted Byzantine alliance with the Norman kingdom" is a most illuminating glimpse into the highly imaginative schemes of Manuel I Comnenus. Mr. Parker is probably right in thinking that Manuel lacked adequate knowledge of the politics of Western Europe, but it must be remembered that he was deal-

ing with a regency for the minor King William II of Sicily. Had a similar offer, the hand of the emperor's daughter with the right of succession to the imperial throne, been made to a Roger II, the whole history of the Mediterranean world might have been changed.

The essay entitled "Some Fourteenth-century Neapolitan Military Effigies" contains a most interesting account of the development of the armor shown during the period 1320-1360. It would have been more useful to readers who are not experts in the field if it had compared this armor with the contemporary styles in other countries. To the non-expert it looks as if Naples was fifty years behind England in the use of plate.

The essay on "Florentine Families and Florentine Diaries in the Fourteenth Century" is chiefly interesting to this reader through the information it gives on the sources of the wealth of some great Florentine families—particularly the relationship between investment in land and trade.

These are but a few samples from a rich table. Some of the essays such as "Note al Privilegium Libertatis Concesso dai Napoletani agli Amalfitani nel 1190" and "La Testament du Cardinal Richard Petroni" consist of a published document with editorial notes. There are thirty plates, all of which are interesting and well chosen to illustrate the articles. The total result is a book of which Miss Jamison and her friends may well be proud.

SIDNEY PAINTER

THE JOHNS HOPKINS UNIVERSITY

STILPHASEN DER SPÄTANTIKEN KUNST, EIN VERSUCH, by Andreas Rumpf (Arbeitsgemeinschaft für Forschung des Landes Nordrhein-Westfalen: Geisteswissenschaften. Abhandlung, Heft 44). Pp. 52, pl. 40 (190 ill.). Köln, 1957.

The art of late antiquity, long considered of negligible value from the aesthetic standpoint, has been studied with any thoroughness only in very recent decades—for reasons not unconnected with the radical change in aesthetic standards going on during much the same period. While the mediaevalists, pushing back from their prepared positions in the Carolingian era, have managed to shed a good deal of light on the Dark Ages, their colleagues in the classical field, understandably more fascinated by the time of the genesis and flowering of antique art than by its decline, have been more reluctant to venture into the Sargasso Sea which lies beyond the Arch of Constantine. While much has been done to correct this situation by a number of able scholars, a great many problems remain in the way of dating and attribution as well as interpretation. In the study here under consideration, a distinguished authority on classical art shows us in all too brief compass how much can be achieved in this field by the application of sound and rigorous methodology, as well as an open mind. Like more than one other of Pro-

essor Rumpf's works, this little book should be a treasured handbook for years to come.

He has assembled an invaluable group of datable monuments from the period A.D. 300-600, surrounded them with additional material which can be related on historical or stylistic grounds, and produced a persuasive sequence of stylistic phases through which he traces the evolution of classical art into the mediaeval. The approach is wholly that of the classicist, but what Rumpf has to say will be of at least as much interest to historians of early Christian and mediaeval art as to those of the classical antique.

It is Rumpf's intention to demonstrate that the art of classical antiquity did not end with the Arch of Constantine: a point well taken and, though scarcely new, perhaps in need of such fully substantiated iteration as it here receives. On the other hand, he sees the final end of the classical tradition with Justinian the Great, while we could show him works of art of the tenth century and later in which that tradition is clearly stronger than in many of the objects with which he articulates his thesis. It is all a matter of point of view; Professor Rumpf, who accepts the classicism of the Arch of Constantine, boggles at Coptic Egyptian stelae as non-art. Perhaps the only point on which we need insist is that no firm line should ever be drawn in art, at which one thing forever stops, and another begins.

This essay, originally stated in lecture form in 1953, is far too dense to permit of adequate summary within the scope of this review; suffice it to say that anyone concerned with this period in any way will find challenging and stimulating new ideas to consider. The phases which Rumpf distinguishes in the art of this period are the following: A.D. 295-325, a "hard" style, characteristic of the reign of the Tetrarchy and the early period of Constantine I; 325-360, a "softer" style, returning to the classical antique even on Christian monuments; 360-380, a transitional, firmer style coinciding with the Valentinianic period; 380-400, an elegant, rather decadent art especially fond of working in the precious stones and metals; 400-450, a classicizing, more naturalistic style; 450-490, a "visionary," "ecstatic," transcendental style coinciding with the final collapse of the Western Empire; 490-525, a "stiffer" style, marking however a return to more classical proportions; and 525-560, a final classicizing phase, marked sometimes by a highly painterly naturalism, sometimes by a rather conventionalized rhythmic abstraction, preceding the final descent to mediaeval style late in the reign of Justinian I.

It is easy to become imprisoned within too rigid a framework, but Rumpf has by and large avoided the peril. He does not insist on precise details, and even overlaps some of his period borders himself. We wonder, on the other hand, whether his point about the essential unity of style within the Empire during any particular period, however valid in a general way, does not sometimes lead him to obscure—we should not care to use the word suppress—certain clear regional differences. The coins, which he uses elsewhere so tellingly, give clear evidence, for instance, of wide

disparities of die-cutting style between different mint areas at identical dates during the Tetrarchal period, with his "hard" style tellingly obvious on some, and completely absent on others. Toward the end of his essay, he is obliged to admit the wide stylistic disparity between, say, the mosaics of S. Vitale and the ivories of the Throne of Maximianus, both in Ravenna, distinctions which must be accounted for on geographical rather than chronological grounds. Our own inclination too would be to pick out fewer dates as major turning points throughout the oecumene: 325; 450; 490; 560; and, while accepting Rumpf's distinction of shifts within these major periods, relegate these to a secondary place.

So much for minor differences of opinion; what is important is that the framework here arrived at provides a basis for a great number of significant revaluations of well- and little-known objects of the period. Space will not permit enumeration of all of these, but we single out a few which struck us as particularly interesting.

Rumpf's exposition of the "hard" Tetrarchal style permits him to place within this period, correctly, we think, a number of works which had been dated considerably later; in this and the following period, too, he has some very interesting things to say about late copies of classical sculpture. Particularly noteworthy, and convincing, is his postponing the date of the importance of Constantinople as a cultural and artistic center, from the Constantinian to the Theodosian period. He may over-minimize the influence of Constantine I in semi-retirement there during the 330's, but in the main the point is well taken. Quite impressive are a number of identifications of much-disputed portraits: the Barletta statue as Marcian; the colossal diademed marble head in the Capitoline Museum, his fig. 156, as Flavius Eutharicus Cilica, son-in-law and heir of Theodosius and consul with Justin I in 519 (the rough date of the sculpture); and the porphyry head on the balcony of S. Marco, Venice, known as the Carmagnola, as Justinian the Great, to name just a few. The latter had been identified by Delbrück, on grounds accepted by virtually no one but himself, as Justinian II. The precise type of diadem is still without exact parallel, but Rumpf does make a good case for dating the head in the late reign of Justinian I (or possibly just a decade or two later?).

Two other identifications are somewhat less firm, at least in the opinion of this writer. These are the Great Palace mosaics, excavated by the St. Andrews University expeditions to Istanbul, and the nave mosaics of S. Maria Maggiore in Rome, both of which he dates in the sixth century. In the case of the latter, a consensus of recent opinion tends to a date somewhat later than was once held: they are probably contemporary with the mosaics of the triumphal arch, securely fixed in the 430's; but it is difficult to see that they could be contemporary with the comparable historical scenes of S. Apollinare Nuovo, as Rumpf does. We conjecture that he has been bemused by the distinctive cap-like hair arrangements of the Roman

figures (not really similar to the soup-bowl cuts of such as the Eutharicus bust), and ignores the strongly spatial conceptions of these mosaics, so unlike the two-dimensional organization of those in Ravenna. (A consideration of the handling of space is nowhere used as a stylistic criterion; Rumpf concentrates on more Meroëlian details of figure-style and technique.) On the other hand, we should think that the Roman mosaics fit quite comfortably within his own framework, in the "classicizing" period of 400-450.

In the case of the Great Palace mosaics, we must confess that a Justinianic date does less violence to our own ideas of stylistic development; allowing for their fragmentary state, they would not seem to be conceived in the same sort of spatial depth, despite the strongly classical modelling of the individual figures. On the other hand, the excavators felt that these mosaics come from a part of the structure which should date from Theodosius II—although, in fact, little or nothing is certain in the present state of our knowledge of the Palace—and this too would not seem to us wholly inconsistent with Rumpf's analysis of that period, again ca. 400-450.

As can be seen by the foregoing, there is provided for many a feast of discussion in this slim pamphlet. We may regret the lack of greater scope for the elaboration of fully developed arguments in a number of places where they would have been helpful, but our chief feeling is gratitude for the availability of this challenging essay, its novel ideas, and the body of dated evidence which it provides. The illustrations are small but, for the most part, adequate, and the captions provide guidance to better ones; the important thing is to have them collected here in this way.

JAMES D. BRECKENRIDGE

THE BALTIMORE MUSEUM OF ART

DANGER CAVE, by *Jesse D. Jennings*. Pp. xii + 328, figs. 233 + 13, tables 31. Society for American Archaeology, Memoir No. 14, Salt Lake City, 1957, \$6.00. [Also issued as University of Utah Anthropological Papers, No. 27.]

Jennings has produced a report which I believe to rank with the best half-dozen monographs on American archaeology yet to appear. This is not accident, but is due to the fortunate combination of a beautifully stratified dry cave site which was excavated with great patience and care, and its description by an archaeologist gifted with the rare combination of industry, insight and lucid literary style.

Although Jennings says that the volume is largely "mere description," he should not be taken literally because from the beginning to the end he is writing to the thesis that a good report is a narrative and not "a warmed-over batch of field notes." Artifacts are considered not simply as man-made items, but are continually weighed for what they will yield in terms of human behavior and culture dynamics.

Two sites, Danger Cave and Juke Box Cave, are treated, but the first was larger and yielded more and its story, therefore, becomes the main burden of the report. The caves lie in Utah about fifty miles west of Great Salt Lake very near the Nevada border, on the flank of a treeless range overlooking the saline flatland of the Great Salt Lake Desert which is the ancient bed of Pleistocene Lake Bonneville. Danger Cave stands 110 feet above the present level of Great Salt Lake. The desert environment enforces a cultural adaptation which orients the economy to small seeds and to the hunt, the lifeway to nomadism, and the social group to a band of one or two score people equipped with a simple, durable and portable material culture. As Julian Steward sees the ethnographic peoples of the Great Basin as minutely attuned to the environment, so Jennings through the record of Danger Cave, sees this same ecological adaptation as prevailing since 11,500 years ago.

This environmentally-imposed severe limitation of cultural expression is what Jennings calls the "Desert Culture," and he is chiefly interested in it as a way of life which prevailed with little variation over the wide area between the Rockies and the Sierra Nevadas until about 3000 B.C. when local specializations and increments from outland sources begin to lead to regional specializations (subcultures).

Excavation, by summer student groups from 1950-53, was by stripping the stratified layers one by one. Five cultural strata (Danger I to V) were recognized, and these provide the means of analyzing artifacts in proper chronological sequence. Chipped obsidian and chert projectile points, knives and scrapers, totaling 796 specimens, formed the most numerous class of finds. The trend from early stemmed, expanding base projectile point forms to later stemless ovoid or ovate lanceolate forms is noted. Worn out scraps and discarded items of wood, leather, basketry and cordage, while numerous, fail to provide much enlightenment on the life and times of these early desert cave-dwellers. Basketry of several techniques (called "series" rather than "types" because form and size data are unobtainable from the fragments) show relationships with Oregon, Basket Maker and western Nevada cave sites. Twining is the oldest technique; coiling appears later. Bones of food animals (ungulates most numerous, rabbits next) and all vegetal materials are carefully identified by genus and species.

A total of 12 radiocarbon dates from Danger Cave, 6 from the Michigan and 6 from the Chicago laboratory, provide the dating of the five levels. Accepting the radiocarbon dates Jennings matches them against the geological data on lake levels and their ascribed dates, and comes to some new conclusions. The geo-chronological discussion (pp. 85-98) is a model of clear and concise weighing and summarization of complicated ideas, and he concludes that the effects of the Mankato advance were very weakly registered in the Bonneville lakes, and that the elevation of Danger Cave indicates that the geologists' identification of the Provo terrace with the Mankato is in error. Some

geologists will object to this idea, but if the radio-carbon dates are accurate, Jennings has made a case which will be difficult to shake.

Of much interest and value are the asides which Jennings offers throughout the report. He launches the monograph with a section titled "The Bias," in which he outlines his views on the Desert Culture concept and summarizes Great Basin prehistory over the past 10 millennia. He reviews (pp. 77-85) the excavation methods employed and describes what he now sees to have been unproductive labors performed with the idea of practicing meticulous methods, and tells the reader what he considers to be the dangers of "rote digging" and too-strict adherence to technical devices of recording and reporting. His reflections on problems of artifact classification (pp. 98-99) are refreshing, as are his observations on the practical results to be obtained from typological distributions (p. 265).

The predominant overtone of the report is frequent reference to the Desert Culture, defined as a way of life which is a function of the restrictions imposed by the specialized and limited environment. Aside from diffusionist assumptions, the Desert Culture comes very near to paralleling the Graebner-Schmidt concept of a *Kulturreis*. No derogation attaches to this suggestion, which is intended only to indicate a partial parallel on a theoretical level. Jennings summarizes material culture changes in the site's history (p. 279), but this section is very brief and this reviewer believes that the culture-historical significance of these changes has not been emphasized by the author as strongly as many American archaeologists would have done. This playing down of intra-site developmental changes results from Jennings' view of these as essentially unimportant variations or additions on the major theme of the Desert culture's unity. The emphasis on a relatively unchanging culture spanning 10 millennia struck Jennings as of main significance, and one cannot differ with him since he has fully and competently demonstrated this fact.

ROBERT F. HEIZER

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PRE-COLUMBIAN ART, Robert Woods Bliss Collection, by S. K. Lothrop, W. F. Foshag, and Joy Mahler. Pp. 285, figs. 31, frontis., pls. 162 (118 in color), maps 3. Phaidon Publishers, Inc., distributed by Garden City Books, N.Y., 1957. \$30.00.

Bernard Berenson, doyen of art historians and profound humanist, recently discussed with this reviewer the shortcomings of color plates in art books; he claimed that the colors are not true and that, in reducing or enlarging the originals, the color values are distorted. The Catalogue of the Bliss Collection will dissipate few of these objections. And those who, paging through books on art and archaeology with illustrations in black and white, wish they could see the

objects reproduced in color, will find that there can be too much of a good thing.

The catalogue opens with a preface by Mr. Bliss. He tells how in 1912 he was taken by Royall Tyler to Joseph Brummer's shop in Paris where he bought his first pre-Columbian piece and "... thus were sown the seeds of an incurable malady." Alas, no more glimpses are given, how this famous collection grew in the course of 44 years, nor what happened in that time to the appreciation of pre-Columbian art, to which the collection contributed so considerably. In three short paragraphs, the subjective, esthetic, and historical report ends. Ten longer paragraphs are filled with acknowledgements, covering an amazing range of names.

Dr. S. K. Lothrop begins his Introduction, which follows, with the statement that the objects illustrated and described in the volume represent the finest craftsmanship and skill of aboriginal America and that few can be regarded as folk art. One wonders why the term folk art comes up at all in this catalogue.

In his subsequent "Cultures and Styles," the largest section of the text, Dr. Lothrop gives 27 pages of definitions, beginning with the Archaic and Olmec cultures and covering the sites and lands which have bearing on the material represented. The writing is informal and the discussions read pleasantly. A great amount of knowledge and many years of observation are distributed throughout these pages. Anyone who reads them and glances at the nine interspersed photographs will gain a good background in the New World high cultures.

The late W. F. Foshag of the Smithsonian Institution contributes six pages of "Mineralogical Attributions" and brief characterizations of the various types of stone represented in the lapidary work. One wishes also for a discussion of the different methods of carving, so ingenious and effective in spite of primitive tools.

The fact that all the textiles in the collection came from the coastal area of Peru restricts the scope of the explanatory notes written by Joy Mahler of the Peabody Museum, Harvard University. Her four pages of information are tantalizingly brief, with no mention of the dyes. Her glossary of terms will, however, help enthusiasts of pre-Columbian weaving to develop an understanding of the varied techniques involved.

While technological research into pre-Columbian textile work has a number of experts, little has been done in the fields of mineralogical investigations and metallurgy. It is thus all the more regrettable that Dr. Lothrop, one of the few authorities in the latter field, has kept down his "New World Metallurgy" also to a little over four pages. Thus only the outline of this fascinating art is presented, without any illustration of how the pre-Columbian craftsman produced his little masterpieces.

Fifty-two pages at the end of the book form the catalogue of the collection, in which the objects are described, sizes given, provenience or stylistic categories established, and some two dozen further pictures

interspersed. Information is offered as to the purpose various objects served, accompanied in some cases by a description of legends and rites. Maps of the Andean, the Interlying, and the Middle American areas and two chronological charts close this handsome volume, for which clearly no expense was spared. Some 373 objects are illustrated and described. The first 65 pages are set in a luxuriously large type; the catalogue itself is in somewhat smaller type, in two columns. The book measures $13\frac{1}{2} \times 9\frac{1}{2}$ inches and was produced entirely in England, except for the color plates, which were made in Switzerland.

Catalogues, printed for commercial firms or temporary exhibitions, more and more often are furnished with bibliographies, to indicate further sources of information. If a bibliography is omitted, one may understand that the exhibitor had to economize. The absence of any kind of bibliography in this volume is somewhat puzzling. Lack of funds cannot be the reason, when a superlatively lavish budget was available for the work. Yet a bibliography would be in place, since basic ideas, information, and evaluations from other books are incorporated here and many objects illustrated and discussed have appeared previously in print.

The backbone and perhaps the reason of the book are the 270 illustrations, 165 of them in color. Seldom has one seen such exciting photography. It must have been a rare pleasure for the well-known commercial photographer, Nickolas Muray, to work with such an exquisite collection, inviting a variety of experiments in exposure, color, and dramatic lighting. To this reviewer the plates are certainly the most glamorous produced in connection with pre-Columbian art. To mention only a few: the frontispiece mask with its translucent mottled green against a brown red ground; the marble axe from Vera Crux (pl. xiv) balanced on its dark blue base against a clouded sky, achieving almost a surrealistic effect; the Maya pottery statuette (pl. lxx) placed on a mound of gravel with a background of mottled turquoise. The Maya pottery figurine whistle (pl. lxxiv) with a bluish cape and dark red body is so powerful in its plasticity that the restless expressionistic background only enhances the effect. Through the sharpness of focus and the felicitous choice of color, the Teotihuacan jars (pls. xxii and xxiii) appear in all their minute details of texture, coloring, and drawing. In another superb plate (cxxxvii), a mosaic mirror from Peru, the tones are kept down, to render successfully the impact of its turquoise and shell combination. The various gold objects are presented against sky-blue, dark blue, red, and emerald green—in many cases highly impressive.

However, the masterpieces having been picked out, the photographer's inspiration sometimes lagged. Thus it happens that 12 to 15 objects of jade, 16 to 18 of goldwork, are crowded onto one plate, producing a confusing effect—a pitfall which might have been avoided by the use of separating lines. In a few cases the base on which the object is mounted protrudes, with its solid loud color, distracting from the beauty of the

piece itself. Some might complain that three different illustrations of one and the same object give it too much emphasis. Finally, the textiles—where the use of color is best justified—suffer from a certain monotony of tone, revealing the limitations of the color process.

No higher esthetic point of view or all-over orientation can be felt in the concept and lay-out of the volume, subordinating the vigorous attitude of the experienced photographer.

The Bliss Catalogue appears just at the time when one of the most distinguished American institutions, founded partly for the furtherance of humanistic studies, is dissolving its department of archaeology by ukase of its retiring president—an unenlightened decision which, in a time when our system of education is under attack, has already evoked deprecatory reactions, even from abroad. Coincidentally, the greater part of the material in the Bliss Collection comes from the area where the Middle American research of that institution attained such great success and prestige. The Bliss Catalogue in itself is a milestone in the appreciation of pre-Columbian art; and it takes on especial significance as a testimonial that humanistic ideals are still being pursued in this country, in spite of the hysteria evoked by our requirements in nuclear research. The Catalogue reveals with dramatic—indeed sensational impact—that here is an intrinsically original art which only this continent could achieve.

PÁL KELEMÉN

NORFOLK, CONNECTICUT

MOMÍL: Excavaciones en el Sinú, by *Gerardo and Alicia Reichel-Dolmatoff*. *Revista Colombiana de Antropología*, Volumen V, pp. 109-335. Pp. 226, figs. 15, pls. 34. Ministerio de Educación Nacional, Bogotá, Colombia, 1956.

The appearance of this paper is deceptive, for it has the format of a journal article. It is, in fact, a full scale monograph based on excavations at a most important site. Because of the long stratigraphic sequence and because of the strategic location of the site in relation to the problem of cultural connections between the two centers of high culture in the New World, these excavations may prove to be the most significant so far carried out in Colombia.

The site of Momil is located in the tropical forest region of the delta of the Sinú, a major Colombian river. The site was a huge area covered by a rich and deep earth midden. The midden, which contained an amazing quantity of broken pottery and fair quantities of worked stone, bone, and shell, reached a depth of 3.30 meters and was thus the deepest cultural deposit yet explored in Colombia. The basis of this report is a single stratigraphic test pit 2 meters by 6 meters. The contents of another smaller test are not presented in detail but are said to confirm in every respect the results from the larger excavation.

The excavation was made in arbitrary levels of 25 centimeters, which could not exactly coincide with the natural stratigraphy, but approached it fairly closely. The larger excavation produced 336,732 sherds, which the authors have divided among a total of 32 types. The heart of the report is Table 1 where the occurrences of these types are plotted in both absolute numbers and percentages within each of the thirteen levels of the excavation. The individual types are based mainly on modes of surface treatment and decoration. If the illustrations can be taken as adequate all of these decorative modes seem to be discrete entities which can be sorted readily. Indeed, a careful study of their distribution curves through time suggests that some of the types might still be too broad.

The information in Table 1 is not easily assimilated at a glance but with study it reveals an impressive picture of orderly, long term trends in ceramic change. The reviewer found it useful to reduce the percentages of the table to the type of bar graph which has been developed by James A. Ford. Such a graph shows a number of interesting and significant features: almost all of the modes of decoration for which type names have been established show symmetrical, normal distribution curves through time; most of these modes have short periods, two or three levels only, of high popularity; in general the peaks of popularity for the several types do not coincide in time. These facts suggest a high degree of cultural continuity at the site over the total period of occupation. The graph gives such a sensitive measure of change through time, that each level presents a cultural picture which is distinctive.

The authors' earlier period, Momil I, including the lowest 7 levels of the site, is subdivided into 4 phases. Momil Period II consists of the 6 upper levels. Urn burials from a later and distinct culture were intruded into the Period II midden sometime after the bearers of Momil culture had abandoned the site.

After the authors present the stratigraphy of the decoration types, they attempt to relate them to vessel and rim forms, and they treat the stratigraphic distribution of shape and rim form. The two periods at the site seem to break more clearly on this basis than they do on decorative modes. Thus large storage ollas were confined to Period II, while large comals of the type used in the baking of processed bitter manioc were confined to Period I. Annular bases were found throughout the excavation, as were vessel feet, but the latter feature shows an important chronological distinction: mamiform feet (both hollow and solid) and hollow feet of any kind were confined to Period II.

The stone, bone, and shell work is well described. Ground stone axes occur throughout the sequence, but manos and metates, which suggest the use of maize, are confined to Period II. A micro-blade industry is largely confined to the three lowest levels. The authors mention the possibility that some of the flints might be teeth for manioc graters; this seems a reasonable explanation of much of this industry, for the remains

resemble the work of native groups still making graters.

The closing section of the report begins with a brief but persuasive functional reconstruction of Momil culture, a large settled community subsisting largely by the cultivation of bitter manioc but depending also on the hunt for a part of the diet. From the first, pottery was fairly elaborately developed. This community lasted long enough to accumulate 1.75 meters of midden, at which time maize agriculture and a number of other significant cultural traits were introduced which, however, did not break the continuity of culture. The settlement was subsequently occupied long enough to accumulate another 1.50 meters of midden. Then the site was abandoned by the bearers of the Momil culture. At some much later time it was used as a cemetery by a completely different group, who in turn had disappeared by Spanish times.

Unable to date this sequence by internal evidence, the authors discuss the relation of the Momil sequence to the "Formative" cultures of Mesoamerica and Peru, in order to cross-date the Momil in terms of these two areas of secure chronology. This discussion is the weakest part of the monograph. The argument rests mostly on general traits which cannot be given a short and certain time span either in Mesoamerica or in Peru. Also, the authors do not distinguish clearly between "Formative" as a developmental stage and "Formative" as a time period. The report ends with a brief statement on the general pattern of cultural development in Colombia. The reviewer finds the substance of this section highly enlightening but is again made uneasy by the confusion of developmental stage concepts with temporal periods. The authors date the Momil occupation at the site between 1000 B.C. and 0. One cannot begrudge the Reichel-Dolmatoffs their attempt to cross-date the Momil sequence with Mesoamerica and Peru but it is unfortunate that this was substituted for a thoroughgoing discussion of the relationship of Momil to other regional sequences in Colombia, especially those developed in northeastern Colombia by the authors themselves.

Though the argument on which the dating of the Momil site is based is somewhat bald, it does not necessarily follow that the conclusions reached are wrong. The great depth of the site and the amount of gradual cultural change suggest that the site was occupied for a very long time. Under wet, tropical conditions it is hard to imagine such a depth of deposit building up in less than a millennium. Unless a very late terminal date for Momil II is assumed (and there seem to be good arguments against this), the lower part of the site must antedate the beginning of the Christian era. True rocker stamping is one of the few traits discussed by the authors which may have specific value as a horizon marker. It occurs at Tlatilco and La Venta at around 1000-800 B.C. and among north Peruvian complexes of the Chavín Horizon at around 800-600 B.C. It is tempting to assign all of the intervening occurrences of this trait to about 800 B.C., and, indeed, if the trait is to have a precise chronological value it

must be this. On this basis all of Momil I must predate 800 B.C. and the earlier part should begin in the second millennium, since true rocker stamping occurs only in levels 5 and 6. From this point of view the dating of the authors seems conservative.

Another approach to the dating of Momil involves cross-dating, first to the Ranchería River and then to Venezuela. Elsewhere Gerardo Reichel-Dolmatoff ("Momil: A Formative Sequence from the Sinú Valley, Colombia," *AmAntiq* 22:3, 1957) has suggested that La Loma, the earliest period in the Ranchería River sequence, was derived from the polychrome pottery of Momil. This would mean that levels 5 and 6 would precede La Loma. La Loma is related to and possibly ancestral to a ceramic series in Venezuela which is securely dated in the first millennium B.C. Both these lines of reasoning are extremely tenuous but give results which are similar and which suggest that Momil I may extend back well into the second millennium. Although the first occupation of Momil cannot be exactly dated, it was probably somewhere between 1500 and 200 B.C. The reviewer agrees with the authors that a beginning in the earlier part of this range is likely. Momil I may not be the earliest developed ceramic complex in northern Colombia, however, as the authors point out, the ceramics from Barlovento may be earlier, though stratigraphic proof has not yet appeared.

Full evaluation of the significance of the Momil culture in terms of the development of New World Culture must await a more exact dating of the material.

At present there is at least the suggestion that there were large, stable agricultural populations in northwestern South America, with elaborate ceramics, successfully cultivating bitter manioc, at a time as early as the first real flowering of maize-based Formative cultures in Mesoamerica, and contemporary with the non-ceramic, feebly agricultural peoples of Coastal Peru. This possibility requires more substantiation before it can be fully accepted, but if it is accepted it will necessitate rather extensive changes in our general picture of New World prehistory.

The raw material on which this report is based is, therefore, sensational in its implications. The authors' treatment of their data is in most respects admirable. They have carefully quantified and described the artifacts found, so that it is possible for others to use these data for comparative work. Whatever its beginning and terminal dates prove to be, the sequence will stand as a firm block of relative chronology which can be used as a foundation for both temporal and lateral extensions. Thus, this report is far superior to almost all other archaeological reports of similar scope so far published in South America. The virtues of this work are so shining that we will not dwell on its relatively numerous, minor flaws: misplaced decimal points, columns of figures wrongly added, and discrepancies between text and tables. Even a full listing of these errors could not tarnish the general excellence of this report as a scholarly contribution.

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Errata, Vol. 62, No. 2:

The Editor regrets that on plate 37 (von Bothmer) figs. e and f were transposed, and on plate 43 (Lang) Xn1261 was turned 90°.

Page 160, col. 2, line 5, for southeast *read* northeast.

Arithmetical Procedure in Minoan Linear A and in Minoan-Greek Linear B*

W. FRENCH ANDERSON

The study of how the Minoan numerical system could be used in arithmetical computations has not been attempted before, I believe. The study of how the Roman numerals could be used in arithmetic has recently been completed by the author.¹ The Minoan numerals follow the same general rules as Roman numerals. In this article the processes of addition, subtraction, multiplication, division, and extraction of square roots will be explained.

It will be convenient to use Linear B, since Linear A numerals were substantially the same (SM II 51 shows the slight differences). Almost the whole article applies to Linear A equally well.²

The computations, with one exception, will be theoretical and abstract, i.e. they will not be problems drawn from actual Minoan tablets. In the second half of the article, something will be said about the actual use of arithmetic by the users of Linear A and B.

Addition is extremely simple. It involves only the process of counting. If $ooo=|||$ (323) is to be added to, say, $oo=||$ (241), it is only necessary to count how many times each of the separate symbols is used in the two numbers, and the accumulated sum is the answer. To illustrate: there are a total of five hundreds (ooooo), six tens ($\equiv\equiv$), and four units ($|||$) in the above two numbers. Therefore the sum of these two numbers is $oooo\equiv\equiv||$ (564).

If a whole column of numbers is to be added, the process is the same.

Take, for example, an actual tablet, Cno4 (E. L. Bennett, *The Pylos Tablets*). In adding the col-

umn of symbols on the right, no intermediate steps need be written down. Any person, with a few minutes' training, can write down the answer directly from the tablet.

The procedure is as follows: First, count up all the units. There are 12. Write down $||$. This is the units part of the answer. Now, count up the tens starting with two, since we have one ten from the units. We count 43 tens. Write down \equiv . This is the tens part of the answer. Now count up the hundreds, beginning the counting with five since we have four from the tens. We count 10 hundreds. Therefore the answer is $\phi\equiv||$.

With a little practice, this process can be accomplished much faster and more easily than one can add up a similar column of Hindu-Arabic numbers.

Subtraction involves the process of cancellation. The subtrahend (lower number) is cancelled, symbol by symbol, from the minuend (upper number). The symbols remaining in the minuend after cancellation constitute the answer. For example, if $oo\equiv\equiv||$ (262) is to be subtracted from $oooo\equiv\equiv|||$ (368), cancellation of the former from the latter leaves one hundred (o), no tens, and six units ($|||$); or $o|||$ (106).

If there are not sufficient symbols in the minuend for cancellation (i.e., if there are, say, seven tens in the subtrahend but only two tens in the minuend), then the next larger symbol in the minuend is written as ten of the smaller units, whereupon cancellation takes place as before. For example, if $o\equiv\equiv\equiv$ is to be subtracted from $ooo=$, then one of the hundreds (o) from the $ooo=$ is written as

* The numerals are as follows:

1	one
—	ten
o	one hundred
ϕ	one thousand
o	ten thousand

They are given in E. L. Bennett, Jr., *Minoan Linear B Index* (1953) p. 107; also in A. J. Evans-J. L. Myres, *Scripta Minoa* II, p. 51. Groupings of the numerals to make numbers are studied in S. Dow, *AIA* 58 (1954) 124-125. Cf. also note 3.

¹ W. French Anderson, "Arithmetical Computations in Roman Numerals," *CP* 51 (1956) 145-150.

tens. Now the problem is $\textcircled{0}\textcircled{0}\equiv\equiv\equiv-$ minus $\textcircled{0}\equiv\equiv$, which is $\textcircled{0}\equiv-$. If there are not sufficient symbols in the minuend for cancellation, then subtraction cannot take place (without involving negative numbers).

Multiplication, taken step-by-step, is almost as simple as addition and subtraction. This process consists of multiplying each symbol of the multiplicand by each symbol of the multiplier. The multiplying proceeds from left to right, instead of from right to left as in our Hindu-Arabic system. When $\textcircled{0}\textcircled{0}\equiv\mid(231)$ is multiplied by $\textcircled{0}=\mid\mid(123)$, the operation is as follows:

1) Set up the problem:

$$\begin{array}{r} \textcircled{0}\textcircled{0}\equiv\mid \\ \textcircled{0}=\mid\mid \\ \hline \end{array} \quad \begin{array}{l} (a) \\ (b) \end{array}$$

2) Multiply each symbol in (a) by $\textcircled{0}$, because it is the first symbol of (b):

$$\begin{array}{r} \textcircled{0}\textcircled{0}\equiv\mid \\ \textcircled{0}=\mid\mid \\ \hline \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0} \end{array} \quad \begin{array}{l} (a) \\ (b) \\ (c) \end{array}$$

3) Multiply (a) by $\textcircled{0}$ because it is the second symbol of (b):

$$\begin{array}{r} \textcircled{0}\textcircled{0}\equiv\mid \\ \textcircled{0}=\mid\mid \\ \hline \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0} \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \end{array} \quad \begin{array}{l} (a) \\ (b) \\ (c) \\ (d) \end{array}$$

4) Multiply (a) by $\textcircled{0}$, which is the third symbol of (b):

$$\begin{array}{r} \textcircled{0}\textcircled{0}\equiv\mid \\ \textcircled{0}=\mid\mid \\ \hline \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0} \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \end{array} \quad \begin{array}{l} (a) \\ (b) \\ (c) \\ (d) \\ (e) \end{array}$$

5),6),7) Multiply (a) three successive times by $\textcircled{1}$, which occurs three times as the remaining symbols of (b):

$$\begin{array}{r} \textcircled{0}\textcircled{0}\equiv\mid \\ \textcircled{0}=\mid\mid \\ \hline \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0} \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \end{array} \quad \begin{array}{l} (a) \\ (b) \\ (c) \\ (d) \\ (e) \\ (f) \\ (g) \\ (h) \end{array}$$

8) Now add (c), (d), (e), (f), (g), and (h) in the way explained above.

$$\begin{array}{r} \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0} \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \end{array} \quad \begin{array}{l} \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0} \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \end{array} \quad \begin{array}{l} \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0} \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \end{array}$$

When more than ten symbols of any denomination appear, ten of the smaller symbols are changed to the next larger unit. Therefore the final answer would be:

$$\begin{array}{r} \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0} \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \end{array} \quad \begin{array}{l} \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0} \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \\ \textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}\textcircled{0}- \end{array}$$

It might be interesting to compare the above computation with the similar computation of the same problem in our own system:

$$\begin{array}{r} 231 \\ 123 \\ \hline 693 \\ 462 \\ \hline 231 \\ \hline 28413 \end{array}$$

The basic operations in the multiplication of two numbers in Minoan are identical with the operations used in our system (or, for that matter, in any other system), namely, each symbol of the first number is multiplied individually by each symbol of the second number, then the individual results are added up to give the final answer.

Division, in Minoan numerals, has an advantage which is shared only by non-place-value numerical

systems like itself. This advantage, over place-value systems, is that there need be no figuring-in-the-head to determine exactly how many times the divisor will go into the dividend. Contrast the procedure used by us in Arabic numerals. When we divide 216 by 18 (Arabic numerals) we have to use 1 (actually 10) as the first number of the quotient. Then, we determine that 2 is the second number of the quotient, thus finding 12 as the answer.

In Minoan, however, when dividing $○○ - \text{III}$ (216) by $- \text{III}$ (18), it is not necessary to make $-$ the first number of the quotient. In this simple problem, the obvious number to use is $-$, but in a more complicated problem it cannot always be seen immediately which number would be the best to use as the first number of the quotient. In such a case, any first number is used, then repeated if necessary. The operation of successive cancellations merely continues until no more cancellation is possible. The answer is then complete. In the Hindu-Arabic system, as we customarily divide, such procedure is impossible, as pointed out above, for the exact value must be found for each place of the quotient. In the above problem, 1, or III , or III , etc., could be used. This characteristic will be illustrated by carrying out the division of the above problem in several different ways.

The most obvious way of working this problem would be as follows:

1) Set up the problem:

$$- \text{III} \overline{)○○ - \text{III}}$$

2) Find some number which, when multiplied by the divisor, can be cancelled from the dividend. Here $-$ is the largest (and, therefore, best) such number. Multiply $- \text{III}$ by $-$, obtaining $○ \equiv \equiv$. Subtract this product from the dividend ($○$ is changed to $\equiv \equiv$):

$$- \text{III} \overline{)○ \equiv \equiv \equiv = \text{III}} \\ - \text{III} \overline{)○ \equiv \equiv =} \\ \hline \equiv \quad \text{III}$$

3) Repeat the process described in (2): 1 times $- \text{III}$ gives $- \text{III}$. Cancellation (subtraction) leaves $- \text{III}$:

$$- \text{III} \overline{)○ \equiv \equiv \equiv = \text{III}} \\ - \text{III} \overline{)○ \equiv \equiv =} \\ \hline = \text{III} \quad \text{III} \\ \quad \quad \quad \text{III} \\ - \text{III} \overline{)○ \equiv \equiv =} \\ - \text{III} \overline{)○ \equiv \equiv =}$$

4) The final number of the quotient is 1. Cancellation is complete:

$$- \text{III} \overline{)○ \equiv \equiv \equiv = \text{III}}$$

We could have used a different number as the first number of the quotient so long as it satisfied the requirement set forth in step (2) above. Let us use 1 as the first number of the quotient. Then, after setting up the problem, division could take place as follows:

1) 1 is multiplied by the divisor and this product is cancelled from the dividend:

$$1 \\ - \text{III} \overline{)○ \equiv \equiv \equiv - \text{III} \quad \text{III}} \\ - \text{III} \overline{)○ \equiv \equiv \equiv \quad \text{III}} \\ \hline ○ \equiv \equiv \equiv \quad \text{III}$$

2) Again we add 1 to the quotient, and multiply and cancel as above:

$$1 \quad 1 \\ - \text{III} \overline{)○ \equiv \equiv \equiv - \text{III} \quad \text{III}} \\ - \text{III} \overline{)○ \equiv \equiv \equiv \quad \text{III}} \\ \hline ○ \equiv \equiv \equiv \quad \text{III} \\ \quad \quad \quad \text{III} \\ - \text{III} \overline{)○ \equiv \equiv \equiv} \\ - \text{III} \overline{)○ \equiv \equiv \equiv}$$

3) Now, seeing that the quotient is still much too small, we can try $-$. If this is too large we need only go back to the units. However, cancellation shows that $-$ completes the answer exactly. The answer once again is --II . If there is a remainder, it is simply placed with the final quotient to show that the answer did not come out even. Notice that II is the same as --II . There is no subtractive principle in Minoan numerals as there is in Roman numerals (where IV is not the same as VI).

$$\begin{array}{r}
 \text{--II} \\
 \hline
 -\text{IIII}) \text{○} \equiv \equiv \equiv -\text{IIII} \text{ III} \\
 \quad \quad \quad -\text{IIII} \\
 \hline
 \text{○} \equiv \equiv \equiv \text{ IIII} \\
 \quad \quad \quad -\text{IIII} \\
 \hline
 \text{○} \equiv \equiv \equiv \\
 \text{○} \equiv \equiv
 \end{array}
 \quad \text{or } \text{--II}$$

Even square roots can be taken in Minoan. The finding of the square root of $\text{○} \equiv \equiv = \text{II}$ (625) is illustrated below. The operation is quite similar to the method of extracting square roots in our own Hindu-Arabic System.

1) Set up the problem:

$$\sqrt{\text{○} \equiv \equiv = \text{II}}$$

2) Find a number which, when multiplied by itself (i.e. squared), can be cancelled from the dividend. $-$ is the largest such number. $-$ times $-$ gives ○ . ○ subtracted from the dividend leaves $\text{○} \equiv \equiv = \text{II}$:

$$\begin{array}{r}
 \sqrt{\text{○} \equiv \equiv = \text{II}} \\
 \quad \quad \quad - \\
 - \text{○} \\
 \hline
 \text{○} \equiv \equiv = \text{II} \quad (\text{a})
 \end{array}$$

3) Find a number which, when multiplied by the quotient doubled plus the number, can be cancelled from the remaining dividend (a). (The temporary multiplicand is placed to the left of the problem.) $-$ is such a number, for $-$ times \equiv (the quotient doubled with the number, $-$, added to it) gives $\text{○} \equiv \equiv$, which can be cancelled from the dividend to give $\text{○} \equiv \equiv = \text{II}$.

$$\begin{array}{r}
 \sqrt{\text{○} \equiv \equiv = \text{II}} \\
 - \text{○} \\
 \hline
 \text{○} \equiv \equiv = \text{II} \\
 \equiv \text{○} \equiv \equiv \\
 \hline
 \text{○} \equiv \equiv = \text{II}
 \end{array}$$

4) Repeat the above process using as many symbols as necessary in the quotient until no further cancellation is possible. I times $\equiv = \text{I}$ (quotient doubled, plus the number), gives $\equiv = \text{I}$, which can be cancelled from the dividend:

$$\begin{array}{r}
 \sqrt{\text{○} \equiv \equiv = \text{II}} \\
 - \text{○} \\
 \hline
 \text{○} \equiv \equiv = \text{II} \\
 \equiv \text{○} \equiv \equiv \\
 \hline
 \text{○} \equiv \equiv = \text{II} \\
 \equiv \text{I} \quad \equiv = \text{I} \\
 \hline
 \text{○} \equiv \equiv = \text{II}
 \end{array}$$

5) Repeat 4) using 1 again. This time the quotient doubled, plus the number, is $\text{==} \text{|||} : \text{|||}$:

$$\begin{array}{r}
 \sqrt{\text{○○○}} = \text{|||} \quad \boxed{= \text{||}} \\
 - \quad \text{○} \\
 \hline
 \text{○○○} = \text{|||} \\
 \text{○○} = \text{||} \\
 \hline
 \text{○○○} \\
 \hline
 \text{○○} = \text{|||} \\
 \hline
 \text{==} \text{||} \quad \text{==} \text{||} \\
 \hline
 \text{○} \text{---} \text{|||} \\
 \hline
 \text{==} \text{|||} \quad \text{==} \text{|||} \\
 \hline
 \text{○} \text{---} \text{||}
 \end{array}$$

6) Step 4) could be repeated until cancellation could proceed no further. However, to hasten the solution, and by doing a little scratch work on the side, two or more symbols can be added to the quotient at one time. Here, by adding ||| to the quotient, the solution is obtained as follows: ||| times $\text{==} \text{|||}$ gives $\text{○} \text{---} \text{||}$. This product cancels the dividend exactly:

$$\begin{array}{r}
 \sqrt{\text{○○○}} = \text{|||} \quad \boxed{= \text{|||}} \\
 - \quad \text{○} \\
 \hline
 \text{○○○} = \text{|||} \\
 \text{○○} = \text{||} \\
 \hline
 \text{○○○} \\
 \hline
 \text{○○} = \text{|||} \\
 \hline
 \text{==} \text{||} \quad \text{==} \text{||} \\
 \hline
 \text{○} \text{---} \text{|||} \\
 \hline
 \text{==} \text{|||} \quad \text{==} \text{|||} \\
 \hline
 \text{---} \text{|||} \quad \text{○} \text{---} \text{||} \\
 \hline
 \text{---} \text{|||} \quad \text{○} \text{---} \text{||}
 \end{array}$$

It is obvious, of course, that the above problem could have been shortened by using ||| in step 4) instead of proceeding with one 1 at a time as we did (for illustrative purposes).

If the reader is not acquainted with the process of extraction of square roots, he will probably have a great deal of difficulty in trying to follow the above operations. If, however, he is familiar with the Hindu-Arabic process, he will recognize the very great similarities between the above computation and that of the extraction of the square root of the same number in our system:

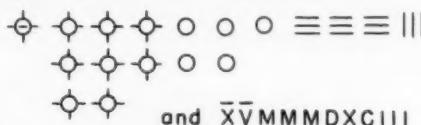
$$\begin{array}{r}
 \sqrt{625} \quad \boxed{25} \\
 2 \quad 4 \\
 \hline
 225 \\
 45 \quad 225
 \end{array}$$

As can be seen, the Minoan system, like all other non-place systems, does not offer any real obstacle to performing the fundamental operations. The apparent difficulty lies only in the unfamiliarity of the symbols and in the few, but significant, differences involved in operating in a non-place-value numerical system rather than in our more familiar place-value system.

It is interesting to note several points of contrast between operations performed in Minoan and in our Hindu-Arabic system, and between Minoan and Roman numerals (the latter is also a non-place-value system like Linear B).

Minoan and Roman computations are practically identical. The major differences are as follows. First, the Minoan operation is a little more cumbersome, since in certain cases it works with up to nine symbols of the same denomination, whereas the Roman system provides symbols for 5, 50, etc., so that four is the largest number of the same type symbol used in any case, and the subtractive principle reduces this number to three. Secondly—and this is an advantage of the Minoan over the Roman numerals—the Minoan operations of addition and subtraction require no thinking whatsoever. They require only counting or cancelling. The subtractive principle in Roman numerals keeps these two operations from being entirely automatic in that system.

The major differences between Minoan and Hindu-Arabic stem from the already-noted fact that Minoan is a non-place-value system, whereas ours uses place to indicate value. Therefore, Hindu-Arabic has two distinct advantages. First, answers may be carried out to as great a degree of accuracy as desired, i.e. to as many decimal places as desired. Secondly, large numbers require comparatively few symbols to express them: compare 18,593 as expressed in our system with



 and $\bar{X}\bar{V}MMMDXCIII$

The discussion of Minoan numerals and their use as given in *AJA* 58 (1954) 123-125 need not be repeated here. Linear A and B numerals do on the whole tend to indicate a limited degree of literacy, in the absence of any special numerals for 5, 50, 500, and 5000, and in other ways. The demonstrations given above of how actual arithmetical computations can be, and may have been, performed should cause our opinion of Linear B literacy in the area of arithmetic to rise appreciably. Addition is far easier in the Minoan Linear scripts than in our Hindu-Arabic system. Subtraction likewise is simpler, being largely mere cancellation. Division is easier with respect to finding the numbers for the quotient; this is also the case for the extraction of roots.

The purpose of the present paper is primarily to show that Linear B symbols *could* be used, without undue difficulty, for all the ordinary arithmetical computations. Just how the Minoans and Mycenaean Greeks actually performed arithmetical computa-

³ Since the present article was written, the important volume by M. Ventris and J. Chadwick, *Documents in Mycenaean Greek* (Cambridge, England, 1956), has been published. On pages 117-119 the authors present an excellent discussion of Mycenaean Arithmetic in which they have collected fully the instances which show that arithmetical computations of moderate complexity were in fact carried out by the scribes at Knossos and Pylos. The several instances of proportions show that the scribes were at least familiar with arithmetical operations more advanced than addition and subtraction. At Mycenae

tions is another matter. But although we know little, we can surmise something about their calculations.

The Egyptians had the abacus, and finger-counting has been widespread. We do not know whether either was used by the Minoans. Later, the Greeks had the abacus.

The vast majority of the preserved Linear B tablets were accounts—lists of items with quantities and sums indicated, and often totals shown. Addition was therefore used frequently. We have seen that addition with Minoan numerals is merely counting. If the counting is written out item by item it becomes what we call tallying. Actual tallying is preserved in one significant instance: EqO3rev (on five other instances see *AJA* 58 [1954] 123).³ The Linear B users therefore knew this intermediate step in addition, i.e., recording so as to facilitate counting. In most instances, however, tallying would have been unnecessary; then no intermediate step was taken.

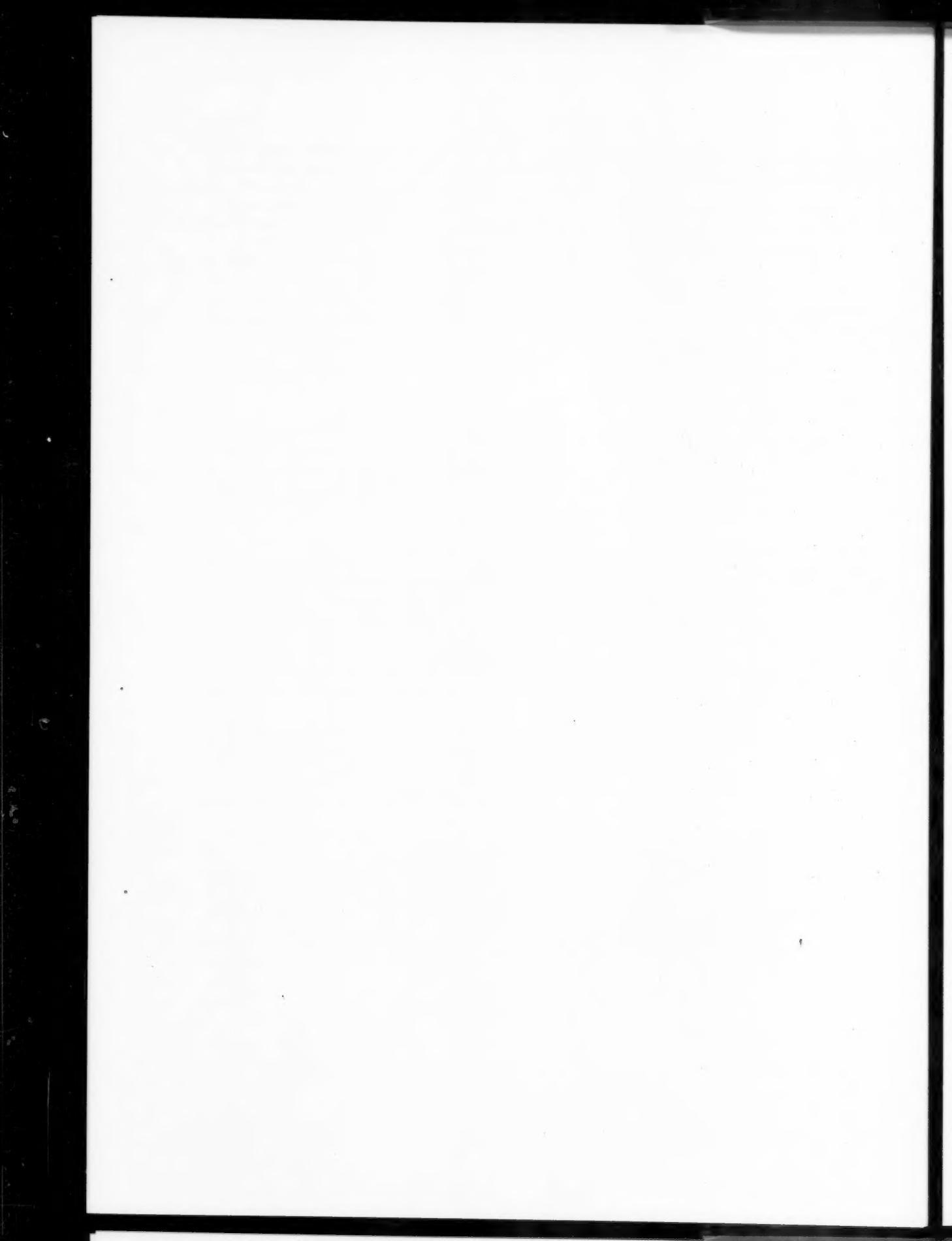
It should be borne in mind that although the preserved tablets give us mainly only simple additions (plus some proportions), so much preserved bookkeeping in the form of brief accounts almost certainly implies bookkeeping on a large scale. Totals for kinds of items, totals for periods, subtractions of losses from gains or vice versa, multiplications of items by a price-per-item factor, and divisions of items or income among interested parties, can all be reasonably imagined. It is not idle, therefore, to have shown the procedures by which these computations could be performed.

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itself it is probable that engineering as well as commerce and government involved arithmetic fully as difficult. Ventris and Chadwick suggest no methods of computation. For comments on what they say of numbering systems, see S. Dow, *CP* forthcoming 1958.

Fractions are not considered in the present article: they would not clarify the operations, but would lead far afield. They are, however, important, and the prime article is E. L. Bennett, Jr., in *AJA* 54 (1950) 202-222; see also J. Sundwall, *Soc. Sci. Fennica, Com. Hum. Litt.*, 19, no. 2 (1953).

P L A T E S



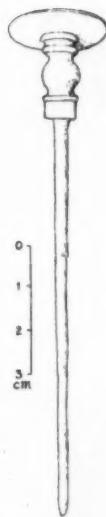


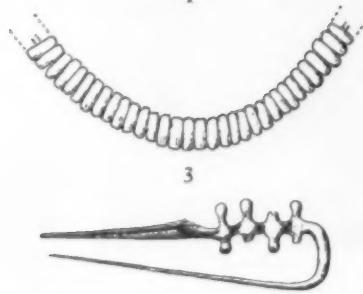
Fig. 1. Syracuse,
grave 223



Fig. 1a. Syracuse,
grave 223



I



3



2

Fig. 2. Syracuse, grave 326 (after Orsi)



4



1 2 3 4 5

Fig. 4. Syracuse, grave 219

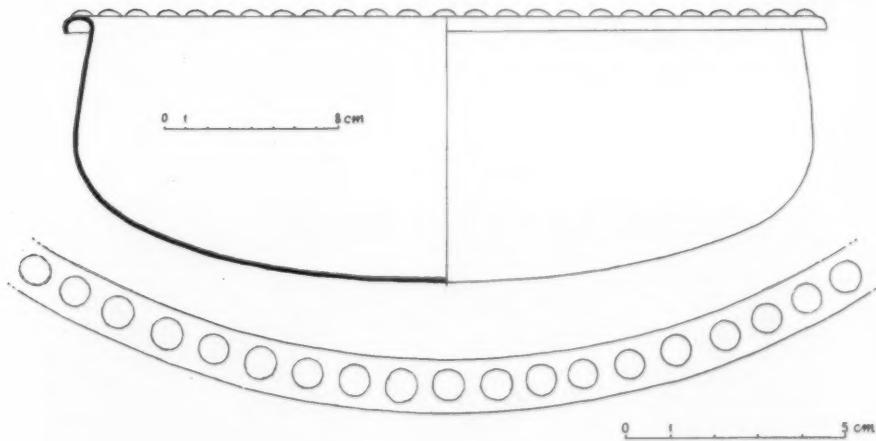


Fig. 4a. Syracuse, grave 219

PLATE 57 HENCKEN



Fig. 3. Syracuse, grave 205

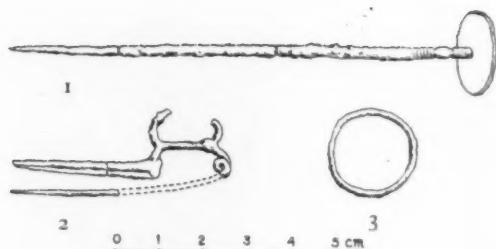


Fig. 3a. Syracuse, grave 205

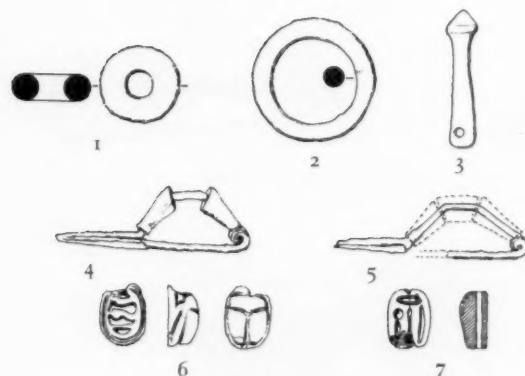


Fig. 5. Syracuse, grave 308

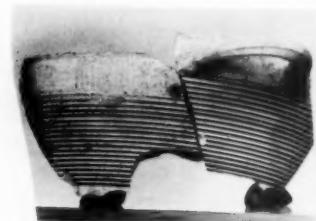


Fig. 6. Syracuse,
grave 486

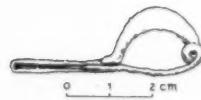


Fig. 6a. Syracuse,
grave 486



Fig. 5a. Syracuse, grave 308

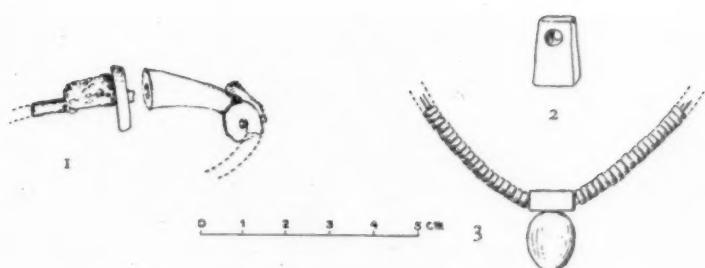


Fig. 7a. Syracuse, grave 175 bis



Fig. 7. Syracuse, grave 175 bis



Fig. 10. Syracuse,
grave 556

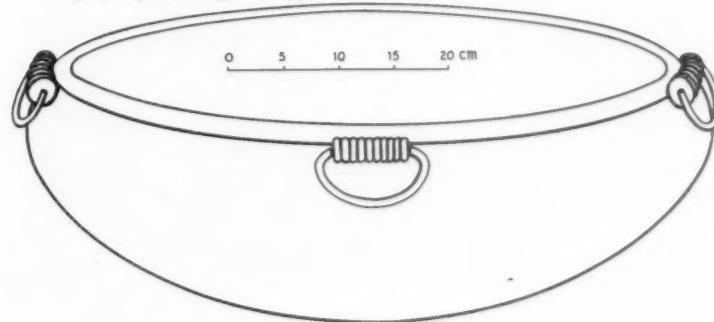


Fig. 10a. Syracuse, grave 556



Fig. 8. Syracuse, grave 471

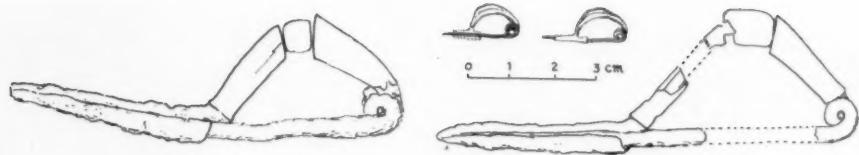


Fig. 11. Syracuse, grave 465

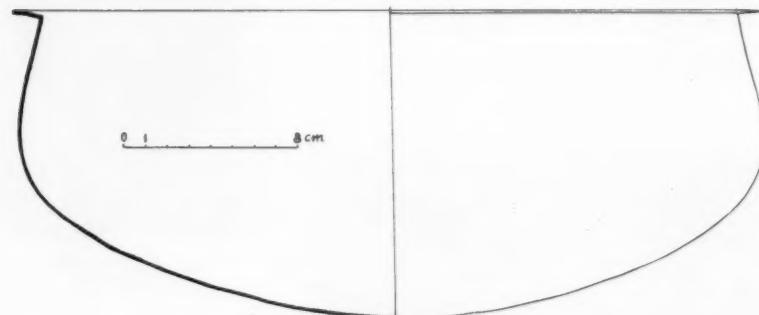


Fig. 11a. Syracuse, grave 465



Fig. 11c. Syracuse,
grave 465



Fig. 11b. Syracuse, grave 465



Fig. 12. Syracuse, grave 276



Fig. 13. Syracuse, grave 428



Fig. 13a. Syracuse, grave 428

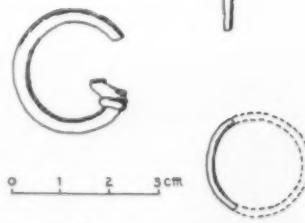


Fig. 14a. Syracuse,
grave 366

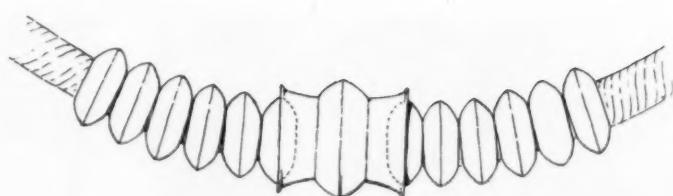


Fig. 14. Syracuse, grave 366

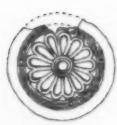
PLATE 61 HENCKEN



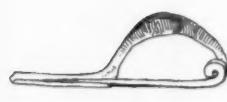
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2



3



4



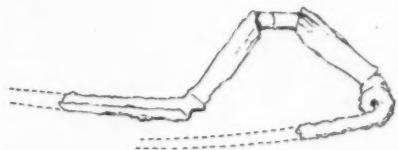
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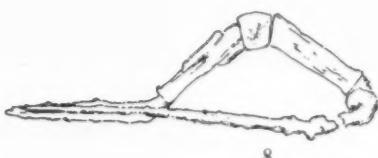
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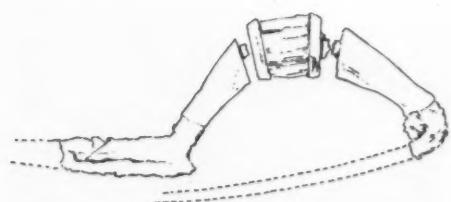
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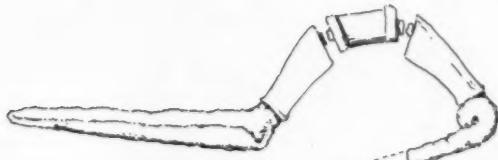
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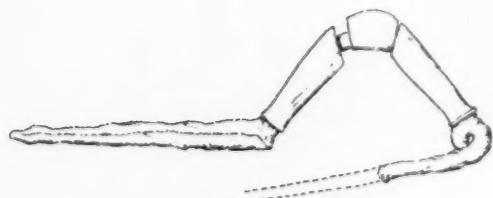
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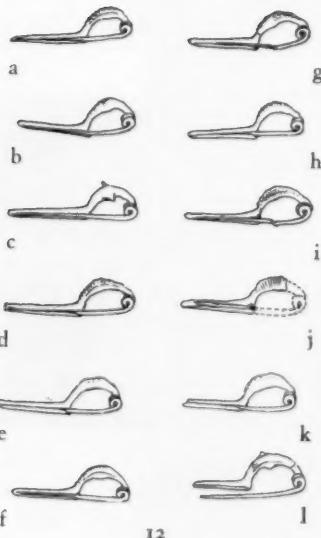
9



10



11



12

0 1 2 3 4 5 6 7 8 cm

Syracuse, grave 428

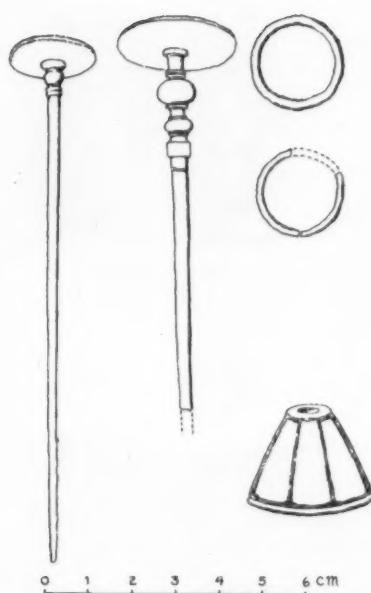


Fig. 15. Syracuse,
grave 108



Fig. 15a. Syracuse, grave 108

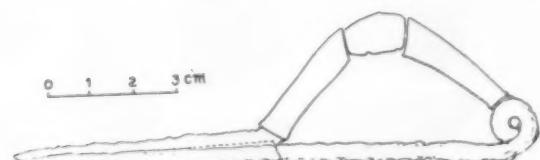


Fig. 16. Syracuse, grave 158



Fig. 9. Syracuse,
grave 412



Fig. 16b. Syracuse, grave 158.
Height 28 cms



Fig. 16a. Syracuse, grave 158

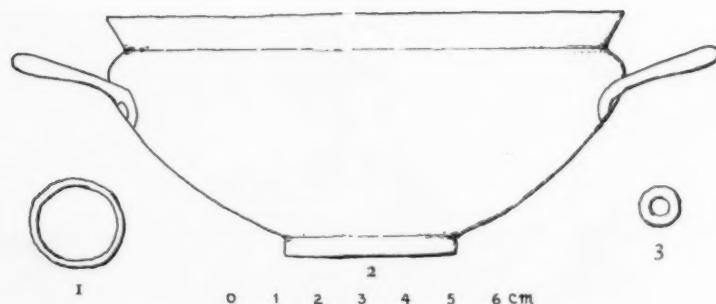


Fig. 17. Syracuse, grave 472



Fig. 20. Syracuse,
grave 261

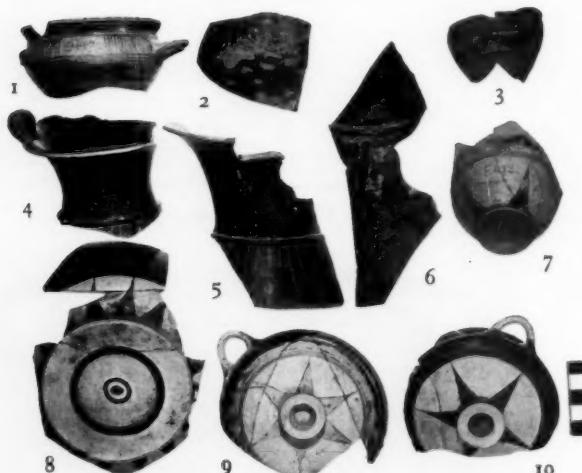


Fig. 17a. Syracuse, grave 472

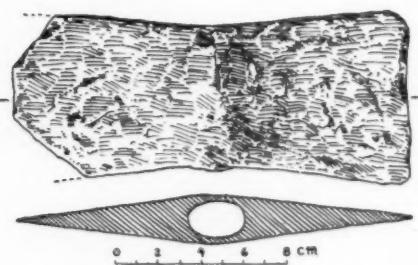


Fig. 20a. Syracuse, grave 261

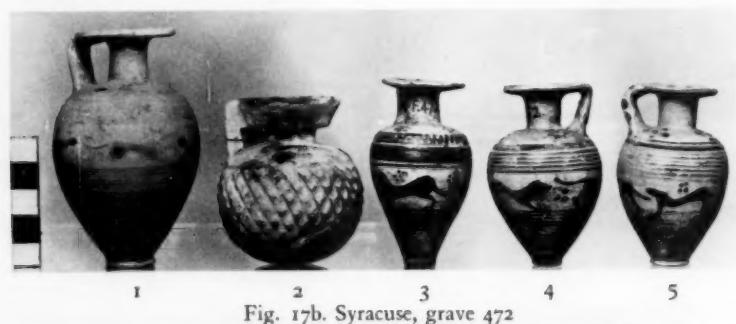


Fig. 17b. Syracuse, grave 472



Fig. 21. Syracuse, grave 367

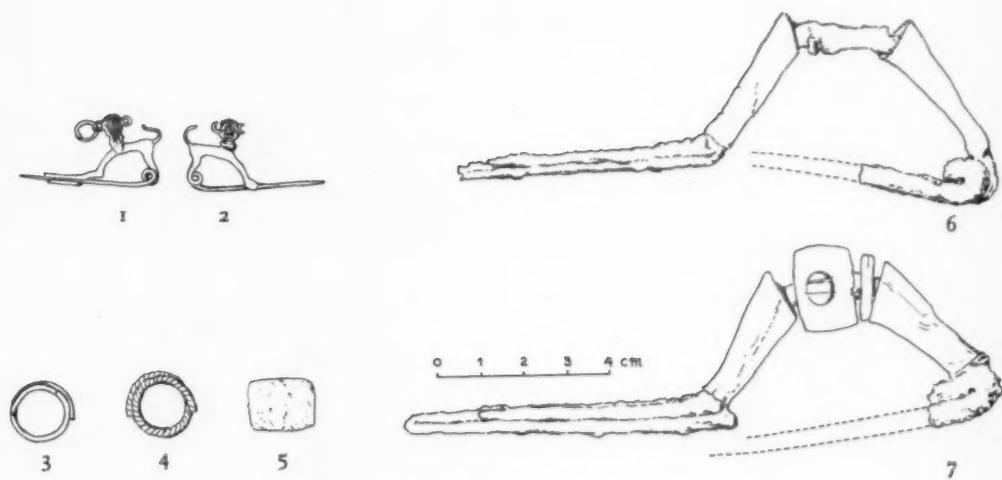


Fig. 19. Syracuse, grave 441



Fig. 19a. Syracuse, grave 441



Fig. 22. Syracuse,
grave 30



Fig. 22a. Syracuse, grave 30

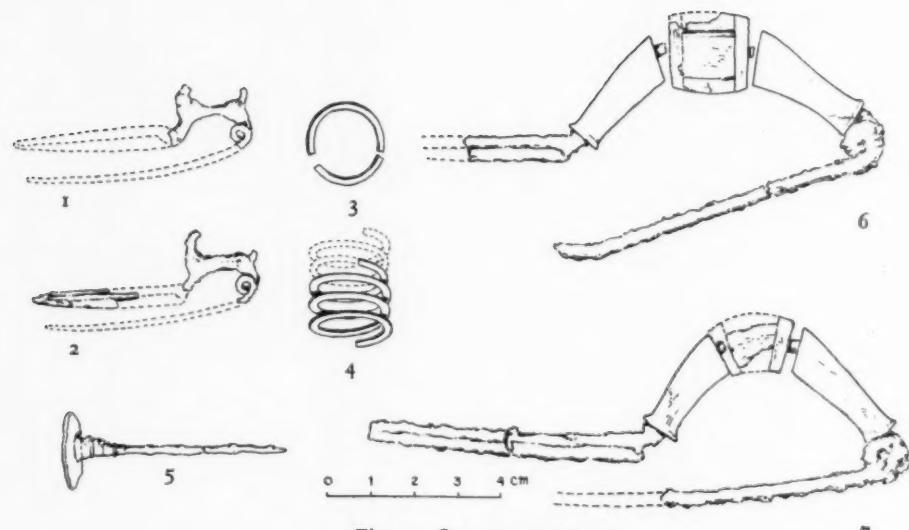


Fig. 23. Syracuse, grave 421



Fig. 23a. Syracuse, grave 421



Fig. 23b. Syracuse, grave 421

Fig. 18. Syracuse,
grave 505



Fig. 24. Syracuse, tomb 267



Fig. 24. Syracuse, tomb 267



Fig. 25a. Syracuse, tomb 165

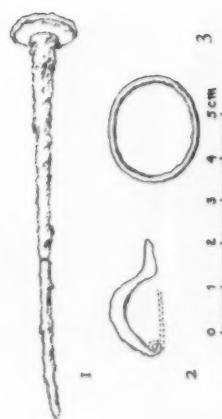


Fig. 25. Syracuse, tomb 165

PLATE 67 HENCKEN

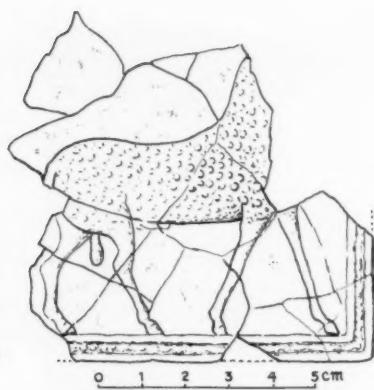


Fig. 26. Syracuse, grave 488



Fig. 26a. Syracuse,
grave 488



Fig. 28. Syracuse, grave 309

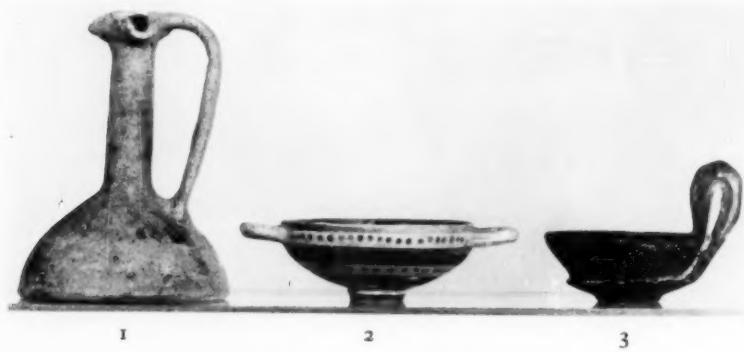


Fig. 28a. Syracuse, grave 309



Fig. 29. Syracuse, grave 495

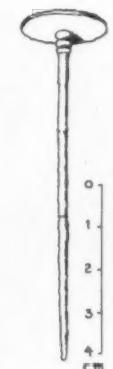


Fig. 29a. Syracuse,
grave 495

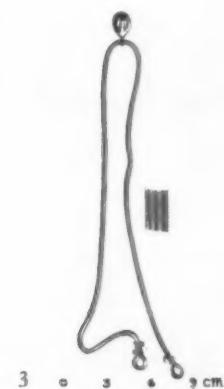


Fig. 30. Vetulonia (all after Montelius). 1: Stele of Avele Feluske.
2: Tomba del Littore. 3: Circolo del Cono

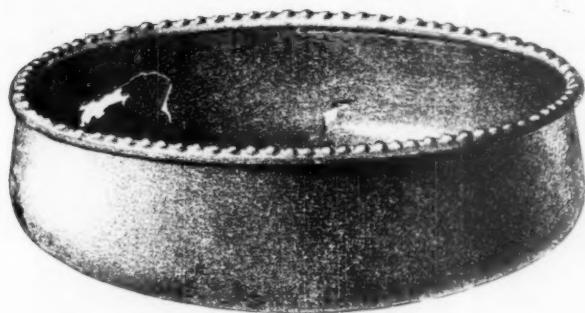
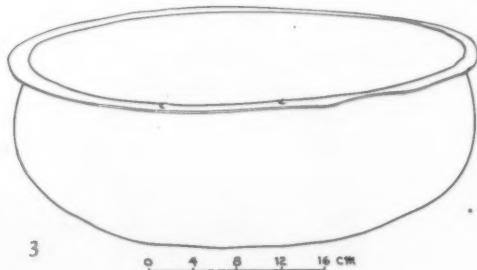
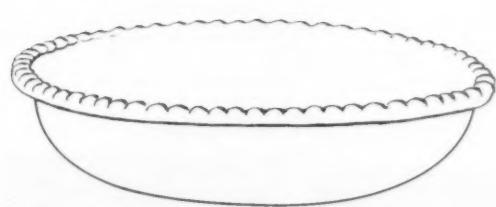
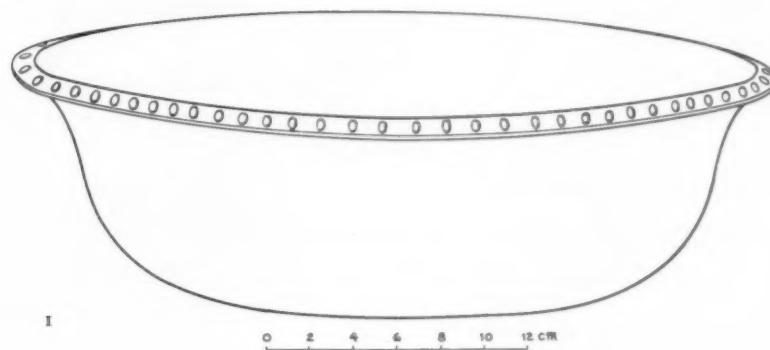


Fig. 31. 1: Syracuse, Fusco cemetery (after Mauceri). 2: Caere, Regolini Galassi tomb (after Pari). 3: Palestrina, Barberini tomb (after Curtis). 4 and 5: Osovo (after Fiala)

PLATE 69 HENCKEN

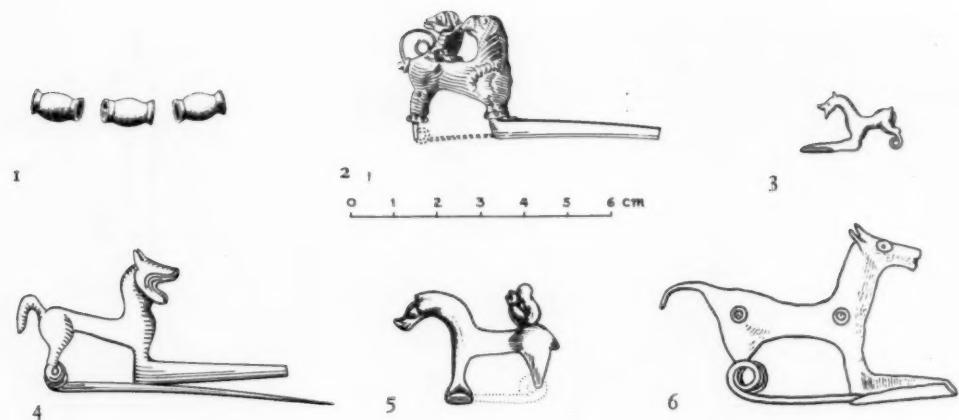


Fig. 32. 1: Vetulonia, Circolo di Bes (after Montelius). 2: Palestrina, Bernardini tomb (after Curtis). 3: Vetulonia, Secondo Circolo delle Pellicie (after Montelius). 4: Tarquinia, Poggio Gallinaro, tomb 8 (after Pernier). 5: Tarquinia, Bocchoris tomb (after Montelius). 6: Hallstatt (after Åberg)

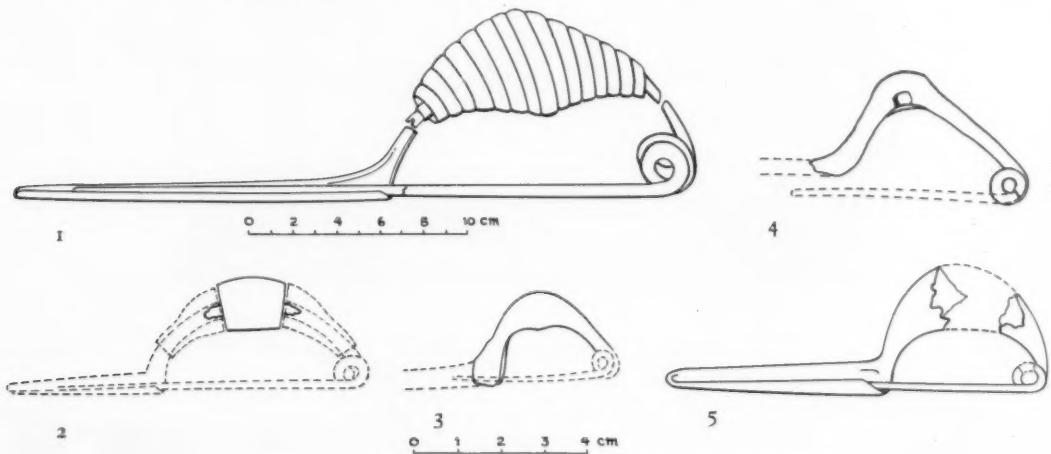


Fig. 34. 1-5: Cumae, first inhumation tomb (after Pellegrini)

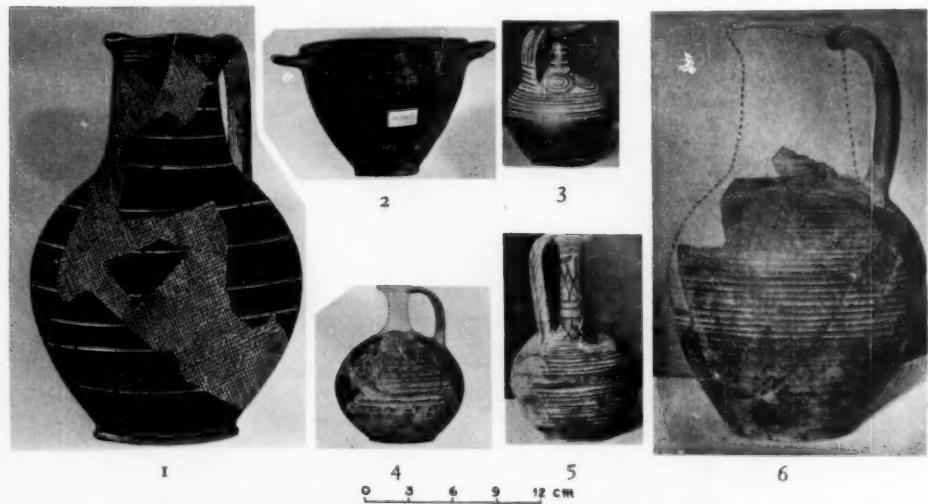


Fig. 35. 1-6: Cumae, first inhumation tomb (after Pellegrini)

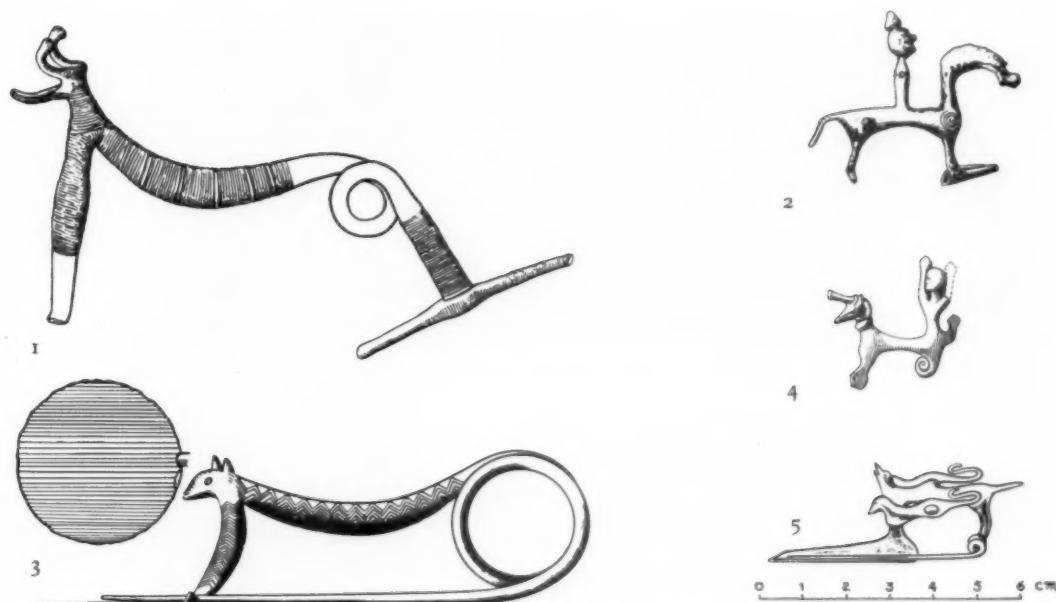


Fig. 33. 1: Sicily, Priolo (after Blinkenberg). 2-5: Bologna (after Montelius)

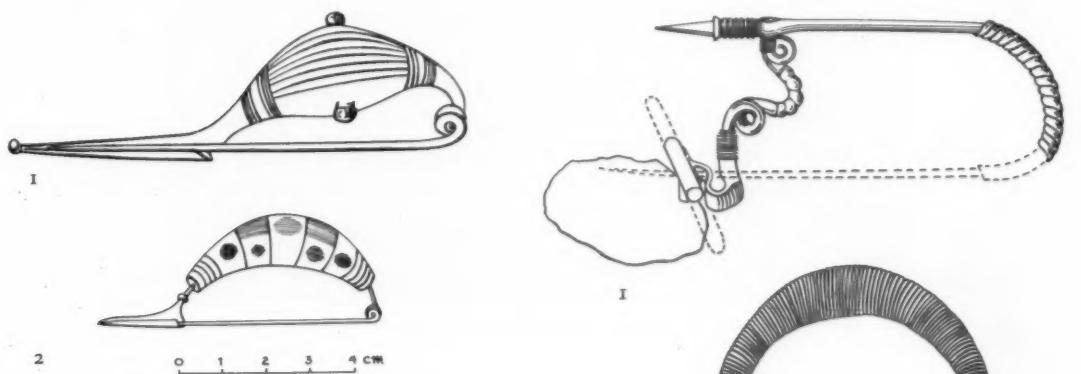


Fig. 36. 1 and 2: Bologna, Arnoaldi (after Montelius)

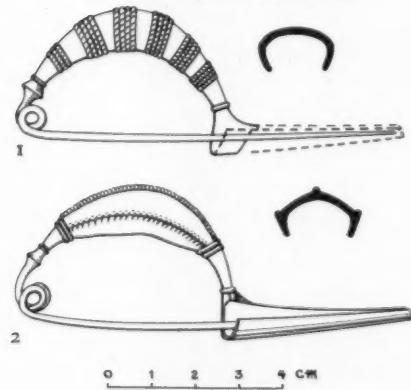


Fig. 37. 1 and 2: Hallstatt (after Åberg)

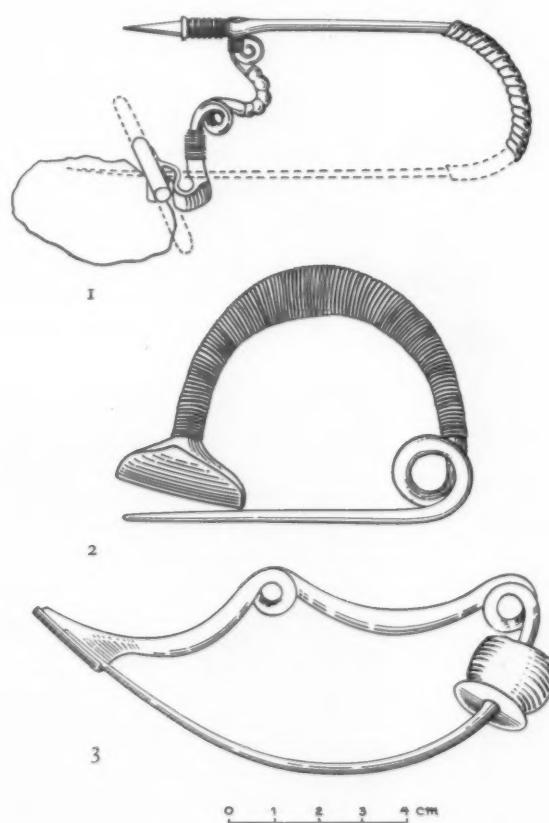


Fig. 38. 1-3: Cumae (after Gàbrici)

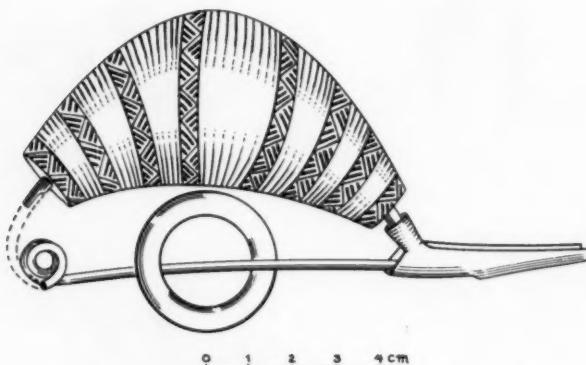


Fig. 39. Bisenzio, Capodimente (after Paribeni)

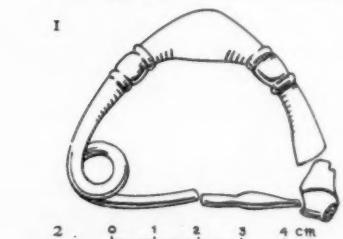
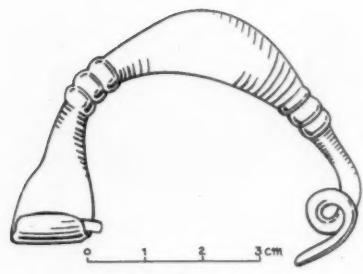


Fig. 40. 1 and 2: Vrokastro (after Hall)

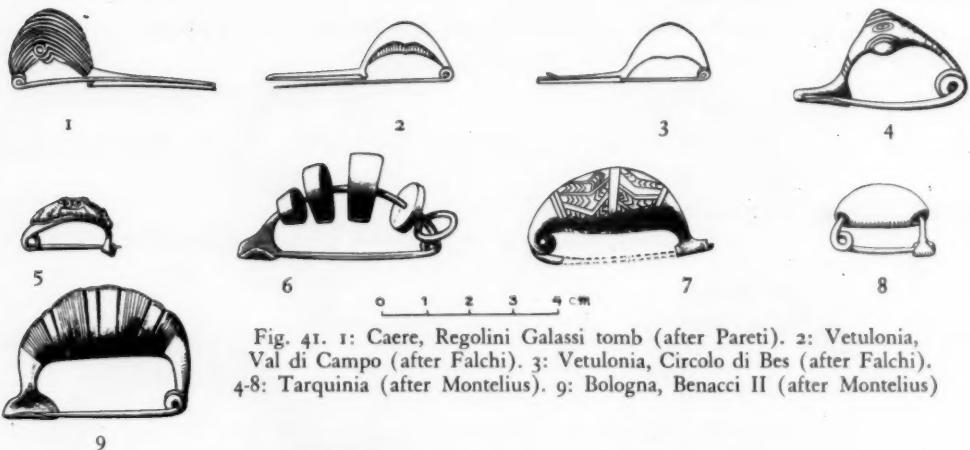


Fig. 41. 1: Caere, Regolini Galassi tomb (after Pareti). 2: Vetulonia, Val di Campo (after Falchi). 3: Vetulonia, Circolo di Bes (after Falchi). 4-8: Tarquinia (after Montelius). 9: Bologna, Benacci II (after Montelius)

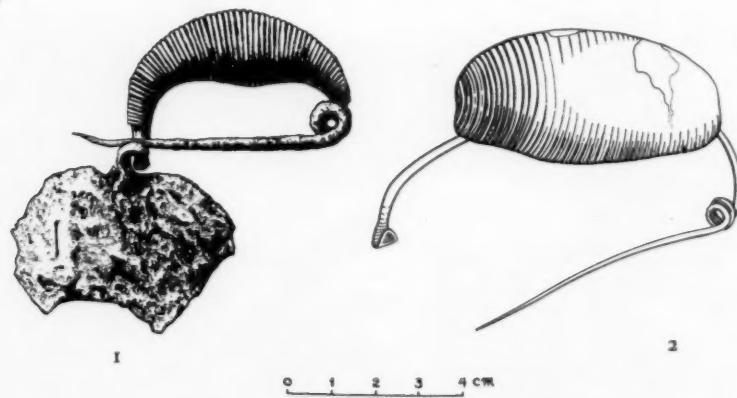


Fig. 42. 1: Bologna, Benacci I (after Montelius).
2: Austria, Statzendorf (after Åberg)

2



Fig. 1. Rome, S. Lorenzo in Panisperna, sarcophagus



Fig. 2. Center of sarcophagus



Fig. 4. Right side of sarcophagus



Fig. 3. Rome. S. Lorenzo in Panisperna, left side of sarcophagus



Fig. 5. Rome, Museo dei Conservatori, sarcophagus front



Fig. 6. New York, Metropolitan Museum, sarcophagus front



Fig. 7. Rome, Villa Savoia, sarcophagus



Fig. 8. Center of sarcophagus



Fig. 9. Detail of sarcophagus



Fig. 10. End of sarcophagus



Fig. 11. Rome, Palazzo Mattei, sarcophagus front



Fig. 12. Zurich, Cem. Rehalp, sarcophagus



Fig. 13. Tunis, Musée Alaoui, sarcophagus from Ste. Marie-du-Zit



Fig. 14. Casale di Marco Simone, sarcophagus



Fig. 18. Teboursouk sarcophagus when found



Fig. 19. Tunis, Musée Alaoui, sarcophagus from Teboursouk



Fig. 15. Tunis, Musée Alaoui, sarcophagus from Carthage



Fig. 16. Center of sarcophagus from Carthage



Fig. 17. Detail of fig. 15



Fig. 20. Tunis, Musée Alaoui, fragment of sarcophagus



Fig. 21. Pisa, Campo Santo, sarcophagus

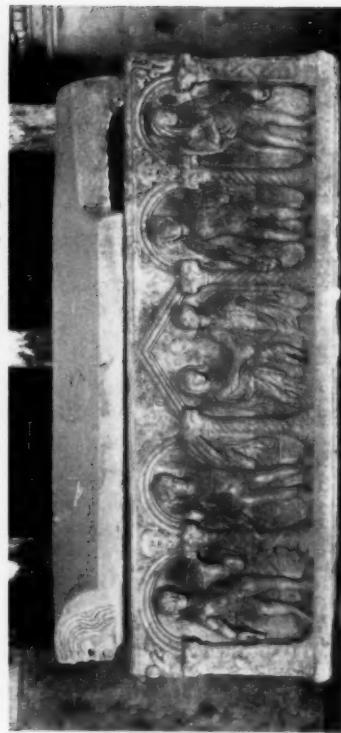


Fig. 22. Pisa, S. Pierino, sarcophagus



Fig. 23. Drawing of sarcophagus in Rome, Sta. Cecilia



Fig. 24. Rome, Sta. Cecilia, fragment of sarcophagus



Fig. 25. Tipasa, Parc Trémaux, fragment of sarcophagus



Fig. 26. Ferryville, sarcophagus



Fig. 27. Center of fig. 26



Fig. 28. Details of fig. 26



Fig. 29. Ampurias, sarcophagus front



Fig. 32. Rome, Vatican, Chiaramonti,
fragment of sarcophagus



Fig. 31. Rome, Vatican, Chiaramonti,
fragment of sarcophagus



Fig. 33. Algiers, Musée National Stéphane
Gsell, fragment of sarcophagus



Fig. 34. Rome, Lateran, Museo Cristiano,
sarcophagus front



Fig. 30. Zagreb, Archaeological
Museum, fragment of sarcophagus



Fig. 1. Conical-shaped Orthopagos



Fig. 2. From within the Lykuressi valley



Fig. 3. Modern town from the ancient acropolis of Chaironeia



Fig. 4. The Lykuressi valley from the plain



Fig. 1. A Melian relief in the Royal Ontario Museum (926.32)



Fig. 2. Detail of the heads of Priam and attendant



Fig. 4. Back of the Royal Ontario Museum relief



Fig. 5. "Ransom of Hector" from a 4th century Italiote krater



Fig. 3. Sketch of 11 Melian reliefs to illustrate shape and means of attachment; not to scale. All except no. 4 (R.O.M.) are illustrated in Jacobsthal, *Die melischen Reliefs*: 1. Pl. 50, no. 88 2. Pl. 60, no. 103 3. Pl. 38, no. 76 4. R.O.M. 926.32 5. Pl. 27, no. 60 6. Pl. 39, no. 78 7. Pl. 44, no. 83 8. Pl. 48, no. 87 9. Pl. 14, no. 25 10. Pl. 46, no. 85 11. Pl. 67b

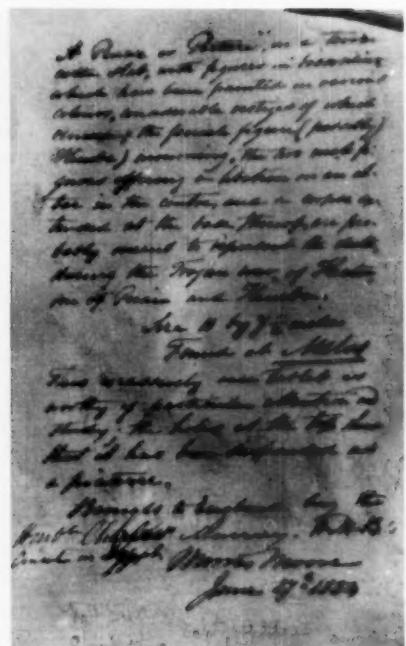


Fig. 6. Document accompanying the R.O.M. relief

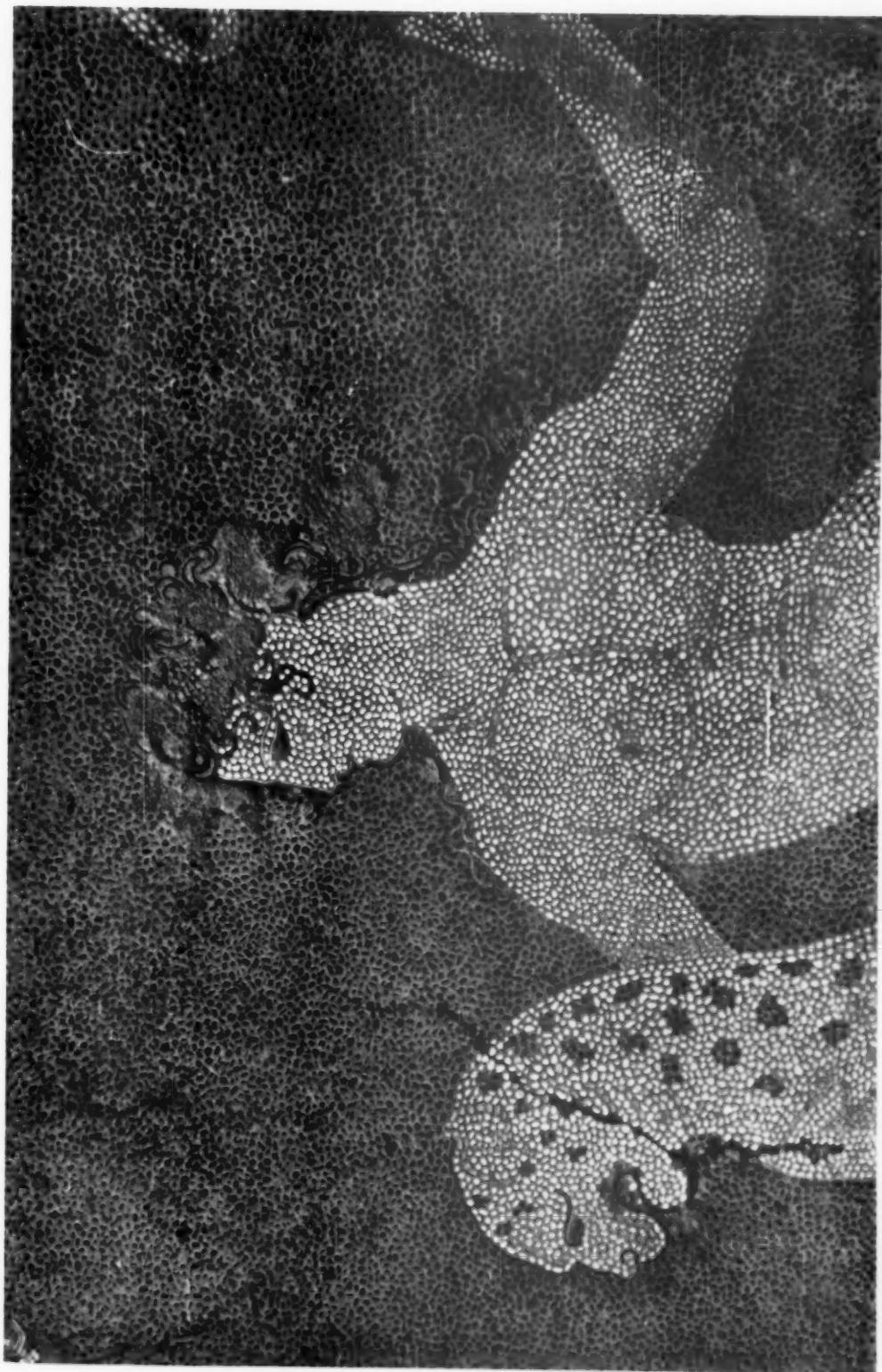


Fig. 1. Pella, mosaic floor. Dionysos and panther, detail

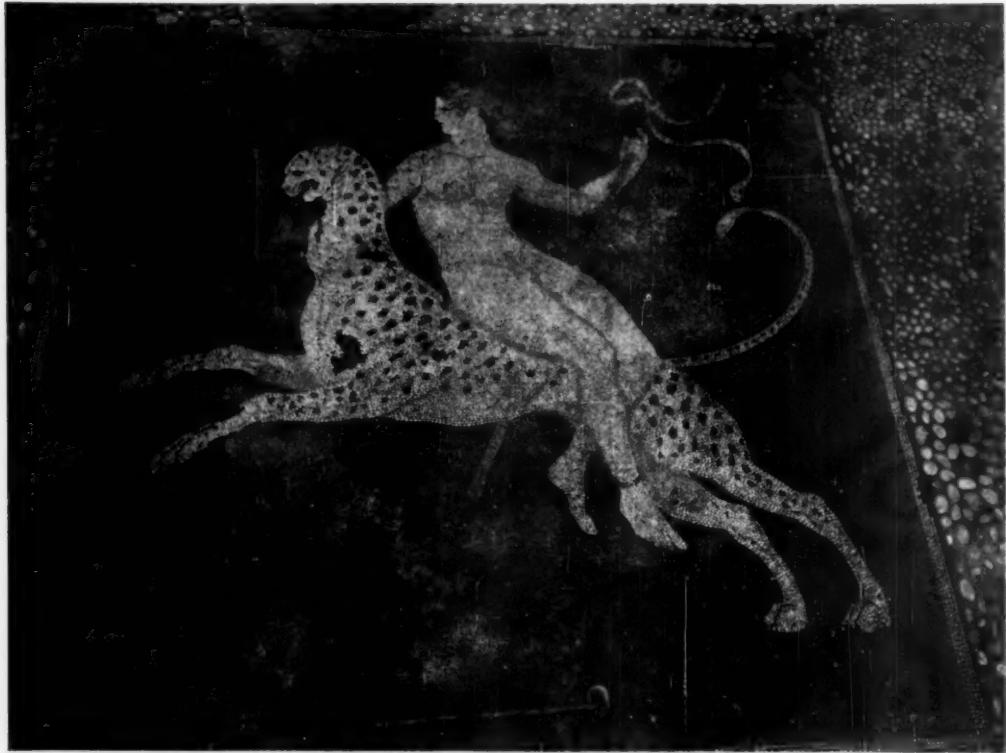


Fig. 2. Pella, mosaic floor. Dionysos and panther

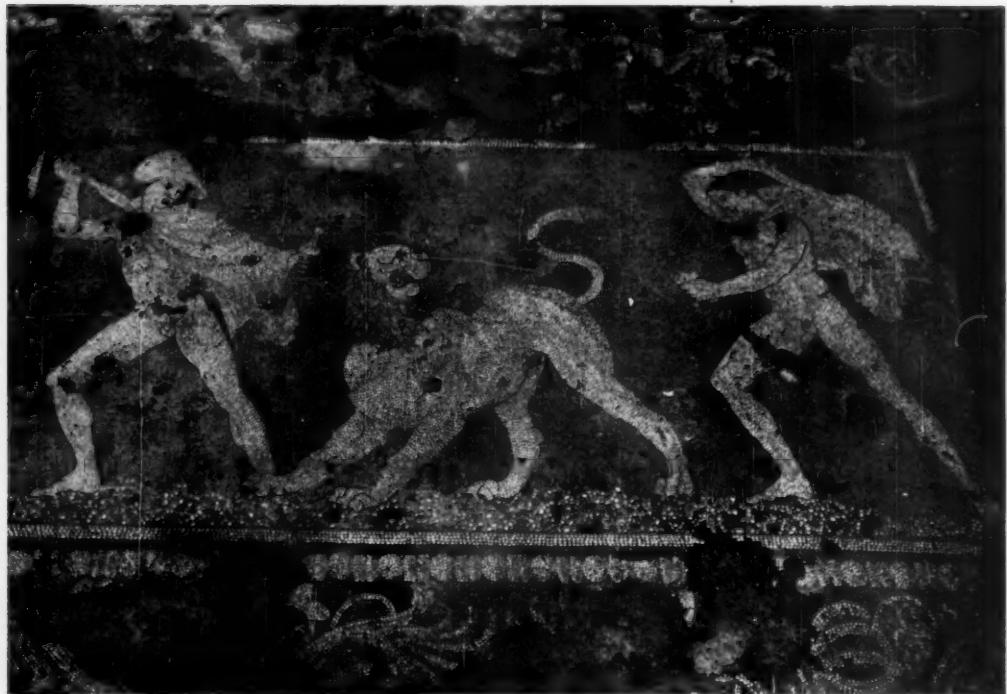


Fig. 3. Pella, mosaic floor. Lion hunt



Fig. 4. Pella, mosaic floor. Griffin and stag



Fig. 5. Anavyssos, grave relief. Woman and child



Fig. 6. Megara, relief from Fountain House. Seated woman

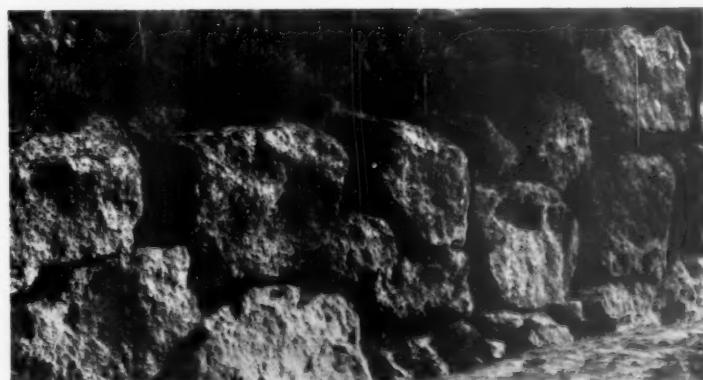


Fig. 7. Isthmus of Corinth, Cyclopean wall



Fig. 8. Samothrace, model of inflated ball



Fig. 11. Aegina, Temple of Aphaia.
Doorway and interior columns as restored



Fig. 9. Athens, city wall

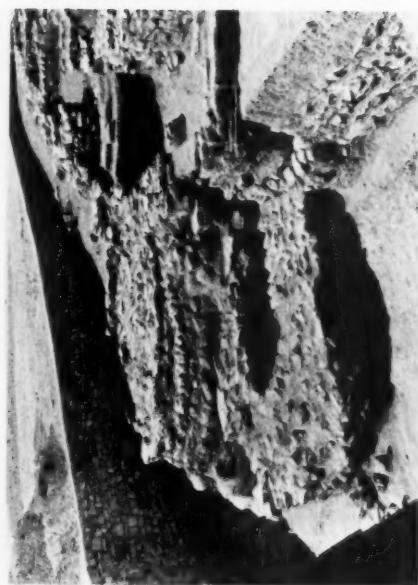


Fig. 10. Lerna, fortification walls of Early Bronze Age

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PTOLEMAIC PAINTINGS AND MOSAICS AND THE ALEXANDRIAN STYLE

by Blanche R. Brown

Number VIII in the series of monographs on Archaeology and the Fine Arts, sponsored by the Archaeological Institute of America, has been published with the aid of a grant from the Metropolitan Museum. Objects from the so-called Soldiers' Tomb on the outskirts of Alexandria and now in the Metropolitan Museum, and unpublished letters by Judge E. E. Farman, who shared in the discovery of the third century B.C. tomb, form the basis of this monograph on painting in the Alexandrian style. It presents a scholarly review of the basic evidence in a field as yet by no means well understood. Address orders to Publication Department of the Metropolitan Museum; price \$7.50 to members of the Institute (\$10.00 to non-members).